Vol. IV

TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, 1936

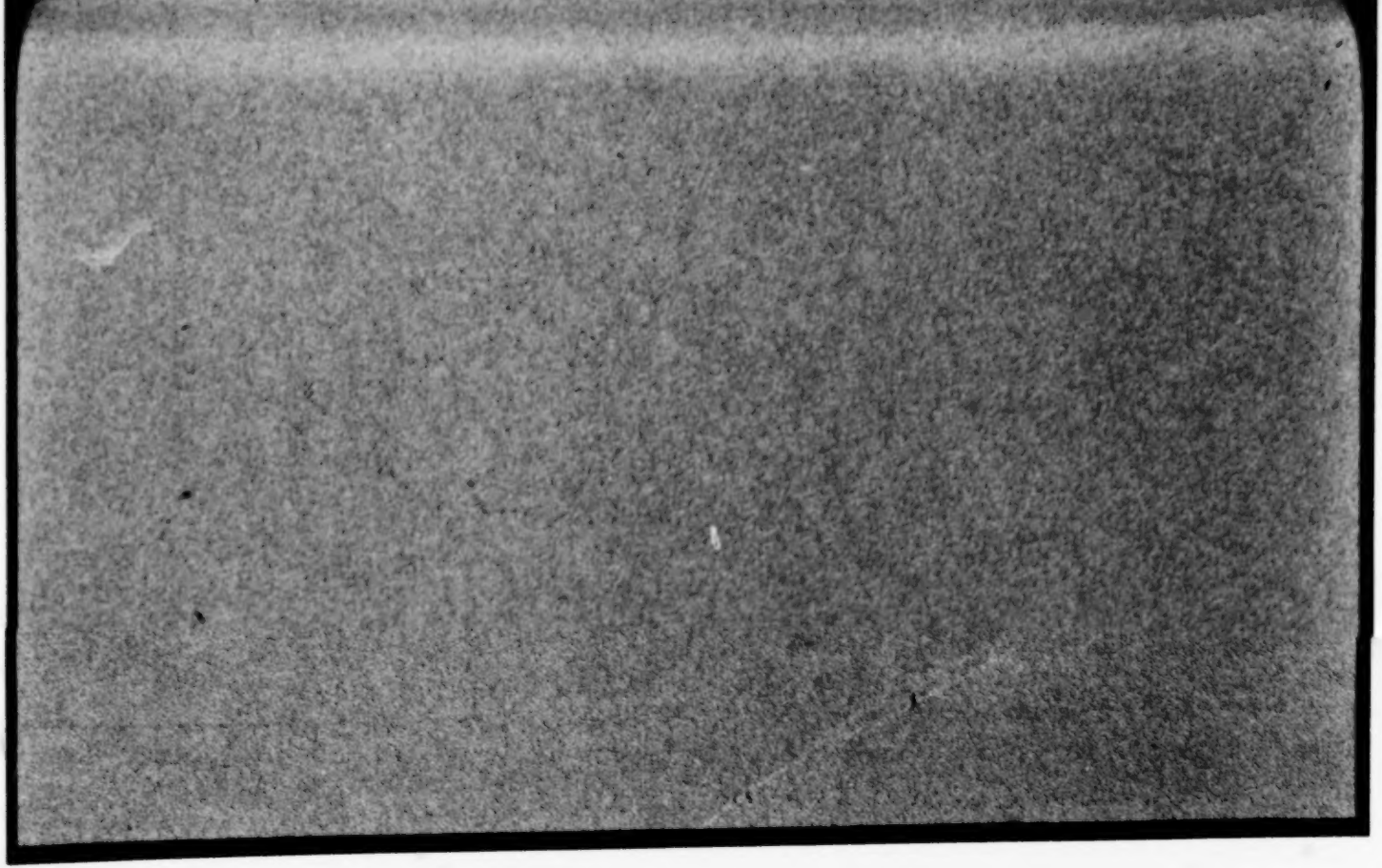
No. 357

ALBERT OTTINGER, AS ATTORNEY GENERAL OF THE STATE OF NEW YORK, APPELLANT,

vs.

CONSOLIDATED GAS COMPANY OF NEW YORK

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK



(31,886)

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VOLUME IV

INDEX.

	Original	Print
Plaintiff's Exhibit 212—Report in the matter of purity, etc., case No. 108	3198	2217
Plaintiff's Exhibit 213—Letter from Francis E. Roberts to George B. Cortelyou, September 1, 1922	3250	2298
Plaintiff's Exhibit 214—Notification of acceptance of order in the matter of gas standards, case No. 108	3260	2299
Plaintiff's Exhibit 215—Letter from Francis E. Roberts to George B. Cortelyou, September 1, 1922	3262	2299
Plaintiff's Exhibit 216—Notification of acceptance of order in the matter of gas rates, case No. 79	3263	2300

JUDD & DETWEILER (INC.), PRINTERS, WASHINGTON, D. C., JULY 17, 1926

J50233

	Original	Print
Plaintiff's Exhibit 217—Order authorizing filing of new tariff schedule	3266	2302
Statement re Plaintiff's Exhibits 218 and 219	3267	2303
Plaintiff's Exhibit 254—Order fixing standard of purity, etc	3269	2303
Plaintiff's Exhibit 255—Petition for order authorizing issuance and sale of 60,000 shares of common stock, etc	3271	2306
Plaintiff's Exhibit 256—Report of accounting division in re petition for order authorizing issuance of common capital stock	3277	2311
Plaintiff's Exhibits 258 and 259—Charts showing land claimed by Consolidated Gas Co	3282	2315
Plaintiff's Exhibit 260—Map showing locations of offices, works, etc., Boroughs of Manhattan, Bronx, and Queens	3303	2315
Plaintiff's Exhibit 261—Diagram of real estate in block No. 989, Borough of Manhattan	3304	2315
Plaintiff's Exhibit 264—Diagram of real estate in blocks Nos. 1456, 1457, and 1475, Borough of Manhattan	3305	2315
Plaintiff's Exhibit 265—Diagram of real estate in block No. 1978, Borough of Manhattan	3306	2315
Plaintiff's Exhibit 268—Reproduction cost of labor and material necessary for laying mains of Consolidated Gas Co., as of June 1, 1923	3307	2315
Plaintiff's Exhibit 270—Reproduction cost of labor and material necessary for laying of services of Consolidated Gas Co., as of June 1, 1923	3308	2315
Plaintiff's Exhibit 813—Cost of production and distribution, year ended December 31, 1922	3309	2316
Plaintiff's Exhibit 814—Statement of taxes, year ended December 31, 1922	3313	2320
Plaintiff's Exhibit 815—Summaries of purchased gas, etc., year ended December 31, 1922	3324	2329
Plaintiff's Exhibit 816—Cost of production and distribution, year ended December 31, 1923	3328	2330
Plaintiff's Exhibit 817—Statement of taxes, year ended December 31, 1923	3336	2334
Plaintiff's Exhibit 818—Summaries of purchased gas, etc., year ended December 31, 1923	3347	2343
Plaintiff's Exhibit 820—Statement of cost of real estate to December 31, 1923	3351	2343
Plaintiff's Exhibit 821—Statement of cost of manufacturing plants and holder stations to December 31, 1923	3362	2343
Plaintiff's Exhibit 822—Statement of cost of street mains and services to December 31, 1923	3371	2343
Plaintiff's Exhibit 823—Book value of meters, etc., to December 31, 1923	3388	2343

	Original	Print
Plaintiff's Exhibit 824—Real estate not claimed to be used in gas business, as of June 1, 1923	3392	2343
Plaintiff's Exhibit 825—Manufacturing plants and holder stations not claimed to be used in the gas business	3401	2348
Plaintiff's Exhibits 826 and 827—Working capital 1922-1923	3406	2351
Plaintiff's Exhibit 828—Summary of cost of property	3409	2352
Plaintiff's Exhibit 829—Investment in fixed capital, Astoria Light, Heat & Power Co., January, 1899-December, 1923	3414	2356
Plaintiff's Exhibit 830—Working capital, the Astoria Light, Heat & Power Co., 1922-1923	3436	2379
Plaintiff's Exhibit 831—Summary of cost of property used by Consolidated Gas Co. in gas business	3441	2382
Plaintiff's Exhibit 832—Graph showing gas transfer system of Consolidated Gas Co. and affiliated gas companies	3445	2387
Plaintiff's Exhibit 833—Forecast of manufacturing requirements of Consolidated Gas Co	3446	2388
Plaintiff's Exhibit 834—Forecast of manufacturing requirements of Consolidated Gas Company and companies connected to general transfer system	3450	2391
Plaintiff's Exhibit 835—Maximum day's send out	3454	2395
Plaintiff's Exhibit 836—Estimated cost of reproduction of Astoria tunnel, as of June 1, 1923	3455	2396
Plaintiff's Exhibit 837—Estimated cost of reproduction of Ravenswood tunnel, as of June 1, 1923	3457	2399
Stipulation re Plaintiff's Exhibit 838	3459	2402
Plaintiff's Exhibit 838—General summary of costs of works	3462	2404
Stipulation re Plaintiff's Exhibit 838a	3559	2405
Plaintiff's Exhibit 838a—General summary of costs of stations and miscellaneous locations	3561	2406
Plaintiff's Exhibit 839—Expenditures necessary to put buildings in condition in which they were when new	3577	2416
Stipulation re Plaintiff's Exhibit 840	3610	2434
Stipulation re Plaintiff's Exhibit 841	3613	2436
Plaintiff's Exhibit 842—Expenditures necessary to put buildings of Standard Gas Light Co. in condition in which they were when new	3620	2439
Plaintiff's Exhibit 843—Expenditures necessary to put buildings of East River Co. in condition in which they were when new	3621	2439
Plaintiff's Exhibit 850—Diagram of real estate in block No. 357, Borough of Queens	3622	2440

	Original	Print
Plaintiff's Exhibit 851—Diagram of real estate in block No. 1482, Borough of Manhattan	3623	2440
Plaintiff's Exhibit 852—Diagram of real estate in blocks Nos. 850 and 2583, Boroughs of Queens and Bronx	3624	2440
Plaintiff's Exhibit 853—Diagram of additional land acquired by the East River Gas Co., as of December 18, 1923	3625	2440
Plaintiff's Exhibit 854—Reproduction cost of labor and material necessary for laying transfer mains, as of June 1, 1923	3626	2440
Plaintiff's Exhibit 855—Reproduction cost of labor and material necessary for laying transfer mains of Standard Gas Light Company and others	3627	2440
Stipulation re Plaintiff's Exhibits 856 and 856a	3628	2441
Plaintiff's Exhibits 856 and 856a—Inventory and appraisal of property of Consolidated Gas Co. used in gas business, as of June 1, 1923	3631	2443
Plaintiff's Exhibit 857—Diagram of certain properties of Consolidated Gas Co. used jointly with its affiliated gas companies	3717	2482
Stipulation re Plaintiff's Exhibit 858	3718	2483
Plaintiff's Exhibit 859—Expenditures necessary to put the buildings of the Astoria Light, Heat and Power Co. in the condition in which they were when new	3725	2492

[fol. 3197a] PLAINTIFF'S EXHIBIT No. 212

STATE OF NEW YORK PUBLIC SERVICE COMMISSION, ALBANY, N. Y.

Report in the Matter of Standards of Purity, Illuminating Power, and Heating Power of Gas, and Standards for the Measurement Thereof, in the City of New York and Suburban Territory.

[Case No. 108]

August 30, 1922

[fol. 3198] STATE OF NEW YORK PUBLIC SERVICE COMMISSION, ALBANY, N. Y.

Report in the Matter of Standards of Purity, Illuminating Power, and Heating Power of Gas, and Standards, for the Measurement thereof, in the City of New York and Suburban Territory.

[Case No. 108]

August 30, 1922

[fol. 3199] Contents

	Page
Introductory	5
Companies affected	5
Witnesses	6
Exhibits	8
The Law Applicable	9
Scope of Inquiry	10
Historical	11
Manufacture of Gas	13
Definitions	15
Standards Generally	15
Candle Power Standard Defined	16
Heating Standard Defined	17
Relation of Candle Power and Heat Value	17

Page

Utilization 18
Utilization of Product Generally 18
Use for Purposes of Illumination 18
Use for Heating Purposes 23
Industrial Uses 26

Distribution 27
Distribution 27
Service Requirements Generally 30
Pressure as Affecting Service 31
Tests 31
Stability of Product 32
Consumers' Service Complaints 32

Heating Standard 35
Heating Standards Fixed by State Commissions 35
Experience Under Heating Standards 38
Efficiency of Service under Heating Standard 45
Effect of Decrease in B. T. U. Content upon Quantity consumption 47

Conservation of Resources 54
Future Development of the Gas Industry 54
Standard to be Adopted 55
Method of Changing Standard 57
Review of Testimony 58
Discussion and Conclusions 61

[fol. 3200] STATE OF NEW YORK PUBLIC SERVICE COMMISSION

[Case No. 108]

Matter of Standards of Purity, Illuminating Power, and Heating Power of Gas, and Standards for the Measurement Thereof, in the City of New York and Suburban Territory.

New York, August 30, 1922.

At a session of the Public Service Commission of the State of New York held in the city of Albany on the 8th day of June, 1921, it was ordered, on motion of the Commission, that on June 16, 1921, a hearing be had by the

Commission as to existing standards of the purity, illuminating power, and heating power of gas, and the standards for the measurement of each thereof, manufactured, distributed, or sold in the city of New York and suburban territory for lighting, heating, or power purposes.

Due notice was served upon the corporations affected, namely:

Consolidated Gas Company of New York,
The Astoria Light, Heat and Power Company,
New Amsterdam Gas Company,
Central Union Gas Company,
The Standard Gas Light Company of the City of New York,
The New York Mutual Gas Light Company,
Northern Union Gas Company,
New York and Queens Gas Company,
The Brooklyn Union Gas Company,
The Newtown Gas Company,
The Flatbush Gas Company,
The Woodhaven Gas Light Company,
The Jamaica Gas Light Company,
Richmond Hill and Queens County Gas Light Company,
Kings County Lighting Company,
Brooklyn Borough Gas Company,
New York and Richmond Gas Company,
Queens Borough Gas and Electric Company,
The Bronx Gas and Electric Company,
Westchester Lighting Company.

On June 16, 1921, the day appointed, a hearing was had and appearances for various parties were entered. Hearings were continued on February 6, 1922, and from time to time thereafter through May 26, 1922, when this case was formally closed. The record is in excess of 1800 pages.

[fol. 3201] Witnesses

The following witnesses were examined:

Called as witnesses in behalf of the Commission:

William Merrifield, Assistant Engineer, New York Public Service Commission, which position he had held since July 1, 1921, prior to that date having been Chief Gas

Engineer, New York Public Service Commission, First District, since July 15, 1919, and, prior to such official connection, engaged in the gas industry since 1891, having filled every position in connection with the manufacture and distribution of gas from laborer to manager, and for five years of that period having been connected with the commercial business of the industry (pp. 176, et seq.).[1]

Charles D. Jenkins, Chief of the Gas Inspection Division, Department of Public Utilities, State of Massachusetts, having been appointed Assistant Inspector of Gas in 1882, and to the office of Chief Inspector in 1893, his duties having been to carry out and supervise inspections of gas as required by law, the witness being a graduate in chemistry of the Massachusetts Institute of Technology.

Edward J. Cheney, a consulting engineer specializing in public utility matters; from December, 1912, Assistant Chief of the Division of Light, Heat and Power of the New York Public Service Commission, Second District, and from May, 1916, Chief of that Division for about four years, as such Chief of Division having had general charge of all technical matters connected with gas corporations and the service rendered by them, this witness having received in 1904, from the University of Minnesota, the degree of Electrical Engineer (pp. 438, et seq.).

Alfred I. Phillips, Service Engineer of the American Gas Association since the first of 1921, a graduate of the Massachusetts Institute of Technology in the course of Mechanical Engineering, who for a period of about twelve years had been engaged in various departments of the gas business, having also served as Associate Gas Engineer of the National Bureau of Standards for approximately two years, and having held positions up to that as Superintendent of Manufacture and Superintendent of Works (pp. 441-a, et seq.).

Frederick C. Freeman, Engineer of the Providence Gas Company, of Providence, Rhode Island, since March 1, 1919, a graduate of Stevens Institute of Technology as Mechanical Engineer in 1903, and thereafter connected with the gas industry in the departments of design, construction, and operation (pp. 827, et seq.).

[1] Page references herein, except as indicated, are to the "Record" in case No. 108.

Philander Betts, Chief Engineer and Chief Inspector of the Public Utilities Commission of the State of New Jersey [fol. 3202] since 1910, having the degrees of B. S., Rutgers College, 1891, M. S., 1895; E. E., Columbia University, 1903; Ph. D., George Washington University, 1914 (pp. 924, et seq.).

Called in behalf of the Consolidated Gas Company:

George E. Woods, Chief Engineer Consolidated Gas Company, who had been in the gas business for thirty-eight years, in New York city for thirty years, having become Assistant Engineer of the Standard Gas Light Company in 1892, Chief Engineer in 1895, and General Manager in 1898, Engineer of Manufacture of the Consolidated Gas Company in 1901 and, in 1911, Assistant Chief Engineer of the Consolidated and the Astoria Light, Heat and Power Companies, in these various capacities having had charge both of manufacture and distribution within and without the city of New York, having had relations with the keeping of accounts and cost data, the construction and operation of plants, and the installation of various types of apparatus (pp. 390, et seq.).

John B. Klump, Assistant General Superintendent of the United Gas Improvement Company, Philadelphia, who has been in the gas business for practically twenty-seven years (pp. 409, et seq.).

Called in behalf of the City of New York:

Henry H. Edgerton, who first went into the gas business in 1858, having studied chemistry, physics and those studies which are chiefly mathematical, at Lawrence University, Wisconsin, and in the old country, having attended lectures in School Central, then in Paris at the School of Mines and the School of Manufactures, also a military school, these studies having been pursued up to 1864; Superintendent of the Fort Wayne Gas Works from 1866 to 1872; builder of gas works all over the country after 1872 (pp. 1379, et seq.).

William R. Birdsley, in the employ of the City of New York since 1906, engaged in the examination of gas and gas appliances, as a gas inspector up to March, 1913, when

appointed Chief Gas Examiner. He described the work of a gas inspector to consist of making physical and chemical examination of the gas supply throughout the city of New York, both as to candle power, heat units, pressure, chemical constituents and chemical impurities (p. 1464). The witness denied, however, that he had ever had any practical experience in the manufacture of gas, though he had studied along the lines of gas manufacture and had read text books (pp. 1661, 1662).

There was also carried into the evidence of this case the testimony of Mr. A. S. B. Little, an engineer in the employ of the City of New York, who testified in case No. 79-A, which concerned the New York and Queens Gas Company, being pages 2888 to 2896 of the record in that case, and pages 1801 to 1823 of the record in this case.

[fol. 3203] Through the introduction in evidence of certain previous investigations by Public Service Commissions of New York, there became available for the Commission's consideration—in case No. 2475, upon the subject of the quality of gas and the gas oil situation—the further testimony of Mr. Merrifield and of Mr. Edgerton, as well as the testimony of a number of other witnesses, and—in case No. 108-A, upon the same subject as here involved—the further testimony of Mr. Klump and of Mr. Little, and that of Mr. H. R. Bogie, Engineer of Manufacture of Kings County Lighting Company, and Mr. R. M. Searle, who had been engaged in the gas industry since 1885, and who testified also in case No. 2475.

Exhibits

The documentary evidence included the following:

Exhibit 2: Statement of "Estimated Savings in Changing from Candle Power Standard to Calorific Value Standard, as of January, 1922".

Exhibit 4: Compilation of State Pressure Regulations (p. 639).

Exhibit 5: Document entitled "Dept. of Commerce, Circular of the Bureau of Standards, No. 32, Standards for Gas Service, 4th ed., Dec. 7, 1920," hereafter referred to as "Circular 32" (p. 641).

Exhibit 6: Pamphlet entitled "Discussion of Lower B. T. U. Standards for Gas," by A. I. Phillips (p. 647).

Exhibit 7: Report to American Gas Association, November 10, 1921, entitled "English Calorific Standards and Their Governmental Regulation," by Alfred I. Phillips (p. 649).

Exhibit 8: Report of the Gas Commission to the Mayor and Council of the City of Philadelphia, dated May, 1921 (p. 712).

Exhibit 11: Statement entitled "Comparative Send-Outs, Providence Gas Company" (pp. 835-848).

Exhibit 12: Statement of comparison of sales (by Providence Gas Company) on 580 B. T. U. and 510 B. T. U. standards (p. 856).

Exhibit 13: Chart showing use in Oakland Villa plat, Porvidence, R. I. (p. 861).

Exhibit 14: Public Service Gas Company, Newark district. Comparison of metered domestic gas sales of years 1917 to 1921, inclusive, (in 100 cubic feet) 750 accounts (p. 1039).

Exhibit 15: Public Service Gas Company, Jersey City District. Comparison of metered domestic gas sales, first seven months of years 1917 to 1921, inclusive, (in 100 cubic feet), 750 accounts.

[fol. 3204] Exhibit 16: Letter dated March 4, 1922, from Mr. F. C. Freeman, addressed to Hon. Wm. A. Prendergast, Chairman, accompanied by Table entitled "Comparative Sales Per Active Meter, Providence Gas Company," and purporting to cover years 1916 to 1921, inclusive. (Set forth in Record, pp. 1046-1056.)

Exhibit 17: "Summary of tests on illuminating value of gas, Jan. 1-Apr. 25, 1921, Public Service Commission for the First District," relating to "Consolidated System," "Brooklyn Union System," and "Independent Companies" (pp. 1080-1102).

Exhibit 18: Report and tabulations prepared by Mr. Merrifield, entitled "Memorandum for Chairman Prendergast. Subject: Studies of Gas Consumption in Its Relation to Gas of varying B. T. U. content" (pp. 1112-1126).

Exhibit 19: Blue print chart re investigation made by a committee of the Institute of Gas Engineers of England (p. 1175).

Case No. 2320, Public Service Commission, First District, entitled "In the Matter of the Complaint, Petition and Application of the Brooklyn Borough Gas Company, * * * for a Hearing and Investigation as to the Illuminating Power, Standard and Price of Gas" in the 31st and 32d Wards of Brooklyn, etc., hearings in which were held in 1918 and 1920.

Case No. 2475, Public Service Commission, First District, which was an inquiry upon the subject of the quality of gas and the gas oil situation.

Case No. 7532, Public Service Commission, Second District, which concerned the "Question of Reducing the B. T. U. Heating Value of Manufactured Gas," and in which hearings were held and closed in June, 1920. No determination was made in the matter, however, and the case was formally closed by the present Commission on September 15, 1921.

Case No. 108-A, New York Public Service Commission, entitled "In the Matter of the Kings County Lighting Company," upon the same subject of inquiry as the present case.

The Law Applicable

The authority of the Commission in this matter is covered by the Public Service Commission Law, section 66 of which has reference to "General Powers of Commission in respect to Gas and Electricity" and provides:

"The Commission shall: * * *

"3. Have power by order to fix and change from time to time standards of the purity, illuminating power and heating power, and standards for the measurement thereof, of gas to be manufactured, distributed or sold by persons, corporations or municipalities, for lighting, heating or [fol. 3205] power purposes, notwithstanding that other standards of the purity, illuminating power and heating power of gas and standards for the measurement thereof, may have been fixed by general or special statute."

Neither by general nor special statute applicable to the City of New York has a standard for "heating power of gas" been fixed. However, in chapter 125, Session Laws of

1906, provision is made with respect to "illuminating power," and section 2 thereof reads as follows:

"§2. The illuminating gas furnished by any such corporation, association, copartnership or person shall have an illuminating power of not less than twenty-two sperm candles of six to a pound, burning at the rate of one hundred and twenty grains of spermaceti per hour tested at a distance of not less than one mile from the distributing holder by burner consuming five cubic feet of gas per hour and each one hundred cubic feet of gas shall not contain more than five grains of ammonia nor more than twenty grains of sulphur nor more than a trace of sulphuretted hydrogen. The pressure of illuminating gas in any service mains in the said city at any distance from the place of manufacture shall not be less than one inch, nor more than two and one-half inches."

There had been a previous and similar statute enacted in 1905, but it was applicable to the supply of gas to the city of New York, while the Act of 1906 related to the supply of gas to all consumers, as well as the city.

Scope of Inquiry

In the disposition of a case of this character, perhaps the line of least resistance is indicated by the instance of Wisconsin, where the investigation conducted in 1907 and 1908 was to "determine the heating value the companies were actually furnishing at that time. As a result, a standard of 600 B. T. U. was adopted". (A. I. Phillips, Discussion of Lower B. T. U. Standards for Gas, Exhibit No. 6, p. 6). Commenting on the Wisconsin investigation, Circular 32, as quoted in Mr. Phillips' "Discussion," stated:

"The conclusion reached was that a majority of the companies were furnishing gas of 600 B. T. U. per cubic foot or higher and that, where this condition existed, reasonable satisfaction to the customer was to be found. A requirement of 600 B. T. U. was therefore prescribed by the Commission. Indeed, at that time no other basis than the previous practice could have been chosen, since practically no data were then available as to the relative cost or the relative usefulness of gases of different heating value."

Mr. Phillips then proceeded to quote from the report of the Massachusetts Board, which investigated the subject in 1916, as follows:

"But the problem has seemed to the Board broader than the mere adoption of a heat value in connection with and perhaps later in substitution for a candle power standard. The consumer pays for whatever is used in the production [fol. 3206] of the gas supplied. If he is paying for something which does not finally reach him, or if a large majority of consumers are paying for something which, in view of the use made by them, is of little or no value when delivered, then it may well be that a different quality of gas will be of more service, and that this difference may be defined in a calorific standard materially lower than one designed merely to continue present conditions. This certainly has seemed to be the motive leading both England and Canada not only to substitute heat value for England and Canada not only to substitute heat value for candle power in gas testing, but to adopt a much lower minimum than has been undertaken in the very general movement towards a heat value standard throughout this country."

Mr. Phillips then points out that at the end of an experimental period of seventeen months the Massachusetts Board fixed a minimum standard of 528 B. T. U., "this being the lowest state standard in existence in this country at the time" (Phillips' "Discussion," p. 7).

"Thus with but one exception, the heating value standards of a few years ago were really inheritances from the days of open-flame lights. * * *

"Under the circumstances, it is not surprising that, as the earlier heating value standards followed those of Wisconsin, so the later ones have conformed quite closely to that finally fixed in Massachusetts a little over three years ago."

This investigation would be at once simplified if it were the fact that the best gas service is to be obtained through the manufacture and supply of gas of high heating value; but that is one of the points of the inquiry, and the Commission is not to be swerved from its public duty to inquire

into and determine the most efficient standard merely because certain parties, by dignified petition or otherwise, signify their opposition to the abandonment of the 22 candle power standard because of its ordinarily high B. T. U. content, or object, by reason of misinformation or otherwise, to the fixing of a B. T. U. standard within the range of such standards as have been adopted throughout the country and abroad, in fact, in practically every *place* of importance in the United States except the city of New York and vicinity.

Historical

The development of the gas industry is instructive. The early process of manufacture was coal gas, until between 1870 and 1880 (p. 471-a), when the water gas process was developed and there resulted bitter competition between the coal gas and water gas interests, the latter endeavoring to displace coal gas, having a process by which high candle power gas could be produced by the use of oil for enriching purposes. The records show that illumination up to 40 candle power was obtained through the open flame burner. Mr. Phillips, in his testimony, attributed the development of the water gas process to the discovery of petroleum oil, the naphtha content of which, corresponding [fol. 3207] to the gasoline of the present day, being a waste by-product, could be purchased for two or three cents a gallon. But high candle power, causing a smoky flame in the burners then used, the water gas industry reduced candle power values to about 20 or 22, this fact being reflected in the standards fixed in various cities (p. 473-a).

Mr. Phillips, in his "Discussion of Lower B. T. U. Standards for Gas," which was presented before the Missouri Association of Public Utilities in April, 1921 (Exhibit No. 6), sketched the history of the gas industry, beginning as follows (p. 4):

"The first company in the world for the general manufacture and distribution of illuminating gas was incorporated by Parliament in the city of London in 1812. Four years later our industry found a place in this country, when a company was established in Baltimore, Maryland. Thus the gas business is just a little more than a century old.

"At first gas was merely 'gas' to the consumer, and its quality received comparatively little consideration. But, within a surprisingly short time after our industry had become an established going business, we find reference to standards. In fixing these, there were two determining factors:—first, all or practically all gas was used for illuminating in open-flame burners; second, all gas was made by the coal gas process. The first determined the type of standard, and open-flame candle power was naturally adopted, since it was the best measurement of the usefulness of the gas to the consumer at that time. The second, the process of manufacture, determined the value which it was economical and practicable to require under the then existing conditions."

The first important change in the gas industry being the introduction of water gas, as testified by Mr. Phillips, it was followed by a change in the purposes for which gas was used. "The incandescent mantle was invented; gas came to be used for cooking, water heating and industrial purposes, and to-day the quantity of gas used throughout the country in flat flame burners, which are the only appliances which depend on the candle power of the gas for their usefulness, * * * has become exceedingly small. The preponderance of the gas now used is for heating purposes. The Welsbach mantle, incandescent mantle, depends, not on the candle power of the gas for its usefulness, but on the heating value of the gas. In fact, a colorless flame is used in heating the Welsbach mantle. Manifestly, candle power is not the useful element in cooking operations. It is the heat produced. The same way in water heating; the same way in industrial operations. This has led to a consideration of the adoption of heat value standards to replace the candle power. In other words, to adjust the standards to the new uses of gas" (pp. 474-a, 475-a).

He testified further:

"The first real attempt in this country to determine what would be the best heating value standard to adopt in substitution for the existing candle power standards was Massachusetts (p. 477-a). * * *

[fol. 3208] "The war caused a shortage of high grade gas making materials, and as a result it became necessary in a number of places to reduce the heat standard for purposes of conservation, and because of the high cost of producing gas of high quality or high heating value" (p. 480-a).

"Most commissions," continued Mr. Phillips in his "Discussion," "are now alive to the need of studying, not only the practical manufacturing considerations, but also the consumers' side of the problem. * * *

"Economic conditions will change, and we may expect additional information as to utilization economy. Even the lower present-day standards are probably only temporary and transitional. To render maximum service the future development of our industry demands even further reductions" (Exhibit No. 6, p. 7).

Manufacture of Gas

"Manufactured gas is not a single gas, but is a mixture of a considerable number of gases" (Phillips, p. 483-a).

Mr. Merrifield testified that the kinds of gas manufactured in New York city are "carbureted water gas, coal gas; I think there is some Pintsch gas manufactured, and some of what is known as Blau gas" (p. 178). But he did not know what proportion of the gas distributed in New York city is carbureted water gas, "nor do I know the amount of coal gas made from time to time, but I might add to that in this way, that all the gas produced on the Brooklyn side of the river, distributed on the Brooklyn side of the river is carbureted water gas, and the gas distributed in Manhattan and the Bronx is partly carbureted water gas and partly coal gas, or rather a mixture of carbureted water gas and coal gas. Coal gas from ten per cent to twenty per cent. The figure would run between ten and twenty per cent of the coal gas and the balance carbureted water gas" (p. 216).

According to Mr. Woods, "the proportion that the Consolidated system is operating is 20 per cent coal gas and 80 per cent (carbureted) water gas" (p. 404).

Coal gas is made from bituminous coal. "The process known as the destructive distillation of coal means the con-

fining of a certain quantity of coal in an air-tight retort. This retort is subjected to heat indirectly applied. That is the coal in the retort does not furnish itself any of the heat necessary for the distillation of the coal. The application of the heat in this manner removes from the coal its volatile constituents which are collected in suitable devices, leaving behind a by-product coke, the solid-carbon in the fuel—in the original coal" (Merrifield, p. 179).

The quality of the gas so produced depends upon the quality of the original coal. "Ordinarily fair coal gas would have a candle power of between fourteen and sixteen candles per cubic foot, and would have a heat content between 580 and 600 B. T. U. per cubic foot" (Merrifield, p. 180).

[fol. 3209] "Water gas is produced by the breaking up of steam into its original elements of hydrogen and oxygen by contact with incandescent carbon in a fuel bed. The gas thus formed is theoretically 50 per cent carbon monixide, and is generally known as blue water gas" (Merrifield, p. 182).

There is practically no luminosity in blue water gas. "It burns with a blue flame, just sufficient luminosity to show you where the flame is without throwing any light around the surrounding objects" (Merrifield, p. 183).

Roughly speaking, blue water gas has a heat value of about 300 B. T. U. per cubic foot, but can be made available for illumination through a flat flame burner "by mixing it with gas composed in part of what is commonly known as illuminants or heavy hydrocarbons." But blue water gas "burned through a mantle burner will give illumination" (Merrifield, pp. 214, 215), "because of the fact that the luminosity of the mantle is no way dependent on the luminosity of the gas, but upon the heating value of the gas" (p. 1137).

Blue water gas, supplemented by gas made through the vaporization or gasification of oil is known as carbureted water gas. The mixture will be of any B. T. U. desired above 300 and will give the degree of luminosity equal to the illuminants or heavy hydrocarbons contained in the original oil (Merrifield, p. 215).

Ordinarily, the quantity of oil used per thousand cubic feet of gas to produce gas of 22 candle power is "something

in excess of four gallons," though the quality of the oil is important, and the oil particularly referred to is that generally described as six-candle oil, which would mean the production of about 24 candle power gas at the plant and 22 candle power at the testing point, usually distant a mile or more from the point of manufacture (Merrifield, pp. 221, 222). Mr. Woods testified that "we run anywhere from 3.75 to 4.75 gallons of oil, depending upon the time of the year," to produce 22 candle power gas (p. 396). He made certain computations of cost of manufacture, however, on the basis of 4.10 gallons of oil per thousand cubic feet of gas produced (Exhibit No. 2).

"Oil contains three series of hydrocarbons: liquid, solid and gaseous. The gaseous hydrocarbons produced from the oil carry the illuminants found in the finished gas. The percentage of illuminants in a mixed gas where one gallon of oil is used per thousand is so small that they are not perceptible in the sea of the surrounding gases. * * * That holds true with respect to two gallons of oil for each thousand and somewhere between two and two and one-half gallons the illumination appears. So you start with a practically non-luminous gas after using two gallons of oil, but the addition of two additional gallons will produce a 22 candle power gas" (Merrifield, p. 223).

As to the quantities of oil generally required to produce gas of various degrees of heating value, Mr. Merrifield testified in case No. 108-a (p. 55), that 1.06 gallons will [fol. 3210] produce gas of 400 B. T. U.: 2.7 gallons, 525 B. T. U.; 3.67 gallons, 585 B. T. U.; and 4.1 to 4.3 gallons, 22 candle power gas.

As testified by Mr. Phillips, the heating value of manufactured gas "is dependent upon the quantity of the different constituents present. The illuminating value is dependent mainly upon certain elements known as illuminants. * * * The illuminants furnish practically all the illuminating value. The combustible elements together give the gas its heating value. In addition there are three main constituents which are present in small quantities, which have no heating value or illuminating value and are merely inert gases. * * * carbon dioxide, nitrogen and oxygen" (p. 483).

"In coal gas the percentage of illuminants is somewhat lower than in water gas. * * * In water gas the quality

will depend upon the quantity of oil used in carbureting" (p. 486).

The importance of these facts was emphasized by Mr. Phillips, who further testified as follows (p. 493-a):

"The practical manufacturing conditions would determine the standard to this extent: The type of plant in use by the company should be taken into consideration, for this reason—that a coal gas plant can produce gas over a certain range of B. T. U. to good economy. When you go above that range that gas must be enriched in some way. If you go below that range it must be diluted with a combustible gas of lower heating value or with inerts, and the dilution by inerts is exceedingly undesirable in most cases. Where it has been practiced, as in England in certain places, it should be under the most careful technical supervision, or otherwise serious difficulties will arise, not only with the service, but with the distribution system of the company. Of course, water gas can be economically produced over a wide range of heating values, that is, comparatively economically produced. It is merely necessary to enrich the gas with a greater or less quantity of gas oil per thousand cubic feet of gas. Blue water gas, which is that produced by the action of steam on coal in a generator of a water gas machine, will average about 300 B. T. U. per cubic foot, and the additional heating value will be obtained from the gas oil."

These are the practical considerations which bear directly upon the subject of standards intelligently fixed for the purpose of serving the best interests of the consumer; there are also problems of distribution.

Standards Generally

According to Mr. Little, "there are two methods" of determining the quality of gas, "one of which is considered obsolete, and is the test for candle power, and the other, or modern method, takes into account the heating quality of the gas as expressed in B. T. U." (p. 1803). These are the standards of "illuminating power and heating power" mentioned in section 66 quoted above, and with these two methods we are here primarily concerned.

[fol. 3211] Circular 32 (Exhibit No. 5, p. 9) states:

"In the early days of the industry gas was used almost exclusively for lighting, and at that time the brilliancy of its open flame was the quality which was of greatest importance. In recent years, however, it has come to be used more and more for heating purposes; gas ranges and water heaters, as well as many types of industrial appliances, have come into general use, while mantle lights, which also depend for their effectiveness upon the heat in the gas rather than the brilliancy of its open flame, have in most cases replaced the inefficient open-flame burner. Thus ability to produce heat has come to be the most important characteristic of gas, and its open-flame candle power is seldom mentioned in recently adopted regulations."

Mr. Merrifield testified that standards for gas vary throughout the United States "from 525 to 600 B. T. U. per cubic foot," adding, "Canada, as I understand, has got a 450 per cubic foot, and Tokio, Japan, has got 400 B. T. U. per cubic foot" (p. 217).

Mr. Phillips produced, and there was copied into the record, a tabulation of "Heating value standards fixed by State Commissions as of April 1, 1921," corrected, however, to date of testimony, February 17, 1922. For convenience it is here set forth (pp. 452-4-a, 455-7-a, 458-9-a).

Candle Power Standard Defined

The "illuminating power" referred to in the Act of 1906 is synonymous with "candle power". There is no ambiguity in the Act requiring interpretation, though we may refer to Mr. Merrifield's testimony that the term "22 candle power as applied to gas, means that gas burning through an open-flame burner at the rate of five cubic feet an hour will produce a light equivalent to that of 22 candles of a certain standard" (p. 181). Mr. Phillips, also, having testified with respect to candle power, that it "is not an intrinsic quality of the gas; it is the light that you are able to produce by it when you use it in a certain particular burner" (p. 506), it is manifest that the candle power standard has direct relation to the burner, or appliance,

through which the gas is used, and, also, to the purpose of utilization, namely, to give illumination.

But the body of consumers is concerned with the function of the service in all the departments of its application, and, accordingly, it would seem that the uses of gas through modern applicances serve somewhat to indicate the standard which should be observed in gas production.

If in the public mind fear be entertained lest a departure from a standard constituting the true measure of service when gas is used through an open flame burner shall mean a decrease in efficiency when used through all other appliances, as well as when used through open flame burners, it may be stated at the outset as the uncontroverted facts that candle power of gas is representative of its value to the consumer only when used through an open flame burner, [fol. 3212] that only a very small proportion of the gas utilized is through such a burner, and that all other gas appliances, domestic and industrial, for cooking, heating and power purposes, function to employ the heating power of the gas and not its luminous constituents.

Heating Standard Defined

It is the modern method of testing gas that "takes into account the heating quality of the gas as expressed in B. T. U.'s" (Little, p. 1802).

The British Thermal Unit was defined by Mr. Merrifield as "a unit of heat measurement indicating the quantity of heat necessary to increase the temperature of a pound of water one degree Fahrenheit" (pp. 181, 182).

For the purpose of elucidation, it is unfortunate that the heat value of gas is not to be visibly appraised, and that the measurement of gas quality according to its British Thermal Unit content involves terms and considerations unfamiliar to those who champion the luminous gas necessary for the highest efficiency of the open flame burner, notwithstanding the greater illumination to be procured through the mantle burner. They must realize, of course, that illuminating gas has heating value, and rightly or wrongly they may conjecture that high candle power gas has high heating power. Indeed, the Assistant Corporation Counsel asked Mr. Jenkins (p. 359):

"Can you furnish a high candle power gas without necessarily at the same time furnishing high B. T. U. gas or a gas having a high thermal content?"

Mr. Jenkins thought that in a general way high candle power gas would entail and show a high B. T. U., but he testified that he could conceive of gases that might not do so.

Relation of Candle Power and Heat Value

Thus there is the further preliminary point to be indicated, that there is no direct relation between candle power and heating power. It was the subject of inquiry throughout the investigation; and any such relation is expressly denied by the expert witnesses.

However, as testified by Mr. Merrifield, "22 candle power gas made from carbureted water gas is generally recognized as having a B. T. U. content of between 640 and 660. I should say 650 is an average B. T. U. of 22 candle power gas" (p. 219). But in some instances the witness stated, tests of 22 candle power gas have shown 700 B. T. U. content (p. 221). On the other hand, 550 B. T. U. gas "gives a light of approximately 16 candle power," where it is used through the open flame burner (p. 231), though gas from bituminous coal, that is, coal gas, "under standard conditions of operation will furnish about 580 to 600 B. T. U. with a candle power of about 15 or 16" (p. 280). Here the witness added that "gas whose candle power depends upon the addition of gas made from an enriching oil is so variable that it is not possible, I believe it is not possible, to fix any [fol. 3213] point where candle power and B. T. U show a distinct relation" (pp. 260, 261).

Assuming the production of gas in the proportions of 20 per cent coal gas and 80 per cent carbureted water gas, Mr. Phillips stated that approximately, 525 B. T. U. gas would be of 13 to 14 candle power; 550 B. T. U. 15 to 16 candle power; and 575 B. T. U., about 17 candle power.

Mr. Jenkins was asked if in the tests made in Massachusetts any definite relation was established between the candle power and the heating value of gas, and he replied (p. 324):

"We do not find any apparent relation between the two methods of valuing gas."

Continuing, he said:

"We started out on this rather large scale investigation to find out how well companies could make gas to a heating standard rather than a candle power or lighting standard, and apparently the gas is not made in exactly the same way. In other words, you are aiming at different objects in making the two qualities of gas."

Further he said (pp. 358, 359):

"When you are making candle power gas, you want to deliver to the consumer's burner as much of the illuminating gases or vapors as you can * * * to make what we call a soft gas, a gas that is tender, whose constitution might be disturbed by pressure or temperature. When we are making a B. T. U. gas we endeavor to make a hard gas, one whose quality shall be uniform if possible from the testing station to the consumer."

Utilization of Product Generally

As stated above, Mr. Phillips testified that the second important development in the gas industry was the change in the purposes for which gas was used. "The incandescent mantle was invented; gas came to be used for cooking, water heating and industrial purposes" (p. 474-a).

Use for Purposes of Illumination

"In order to secure luminosity in the open flame burner, the gas must have a certain proportion of what are commonly known as illuminants or heavy hydrocarbons, and on primary combustion there is a greater quantity of free carbon liberated because of the presence of those illuminants, and the luminosity of the gas depends upon the quantity of free carbon liberated from these particular constituents. It is entirely possible to get a very high degree of luminosity from a mantle burner with an entire absence of these heavy hydrocarbons" (Merrifield, p. 1139).

In further explanation, Mr. Merrifield said (p. 1139):

"There is no definite relation between the heat value of the gas and its luminosity when burned in an open flame

burner, because the factors which contribute 75 per cent to luminosity contribute somewhere about 8 or 10 per cent of the heat value, so that it is entirely possible to reduce the [fol. 3214] luminosity by 75 per cent with 8 per cent reduction of the heat value of the gas. When it is realized that all that is required in the mantle is heat, it can be understood."

"The gas which is required to furnish luminosity to an open flame burner must have a different composition than will give luminosity to a mantle burner." (Merrifield, p. 1140.)

Flat Flame Burners:

Specifically with respect to these appliances, it is to be further observed that when gas is used through them "the combustion of the hydro carbons in the gas produces free carbon, which is raised to incandescence by the application of heat" (Merrifield, p. 224).

"The luminosity produced through burning gas from the open flame burner is due to the presence in the gas principally of the toluol and benzol series of hydro carbons. These particular elements can be entirely abstracted from the gas without affecting it" (Merrifield, p. 1142).

Mr. Phillips testified:

"The action of the gas in an open flame burner is about as follows: The gas comes through the slit or through the jets of the open flame burner, depending on which type of burner it is, the fishtail or the bat wing type, and the first action is a combustion of some of the gas. The heat is produced by that combustion and the illuminants in the gas which are not in contact with the air—with the air in the upper part of the flame—are heated to such a point that they break down into carbon particles and hydrogen. The hydrogen gives no light, but the carbon particles on the interior of the flame are heated to incandescence by the heat of the gases burning on the exterior flame, and they therefore give off light. As they get past the tip of the burner and air finds its way in, these carbon particles are in turn consumed, or, if they are not, there will be a smoky flame and lamp black coming off from it" (p. 823).

Mr. Merrifield was unable to state what proportion of gas manufactured and distributed in New York and vicinity is used for illuminating purposes generally (p. 265), testifying, however:

"I do not recall now just the figures or the different percentages of different methods of gas utilization, but from my general knowledge and general observation of conditions I think I would be safe in saying that much less than ten per cent of the gas made is used through flat flame burners" (p. 266, see also p. 218). He added that it is difficult to believe that any person would use an open flame burner when they could get better service for less cost with a mantle, "that is, greater illumination for a less quantity of gas used" (p. 267).

Mr. Woods testified that in his judgment 80 per cent of the entire output of the companies under his authority is for heating, cooking or power purposes, leaving 20 per cent for lighting both in flat flame and mantle burners, specifi- [fol. 3215] cally stating: "I personally do not think that five per cent of our business is represented in flat flame burners" (pp. 405, 406).

Mr. Merrifield had occasion to conduct an inspection of the territory of the Kings County Lighting Company to determine the extent of the use of open flame burners. As a result of that inspection he testified that it was used "principally in the hallways of tenement houses" (p. 219), that the type of burner used in hallways is generally not large enough to furnish a 22 candle power light, even if gas of that quality is delivered to the burner. "They are usually snubbed down to deliver about one or two feet of gas per hour, and 22 candle power depends upon gas being burned at the rate of five cubic feet per hour * * * Some of the apartments visited had mantle burners exclusively, some had part mantle and part open flame, and some open flame exclusively" (p. 219).

"Tests show that open-flame burners do not develop the whole lighting value of gas as determined by the official burner; the loss is from 7.3 per cent for coal gas to 52.5 per cent for water gas. Open burners vary in efficiency among themselves, the tests ranging from 28.6 to 69.3 per cent of the true lighting value of the gas" (Jenkins, p. 376).

Mr. Phillips' observation is that "the gas used in flat flame burners has become exceedingly small" (p. 474).

Colonel Betts, of New Jersey, testified:

"There have been a great many analyses made, based on the examination of appliances, showing that a very small proportion of the gas is used for flat-flame burners. That has been made up by a census of the appliances using gas, which is taking into account the heat pads, gas ranges and mantle burners, because you remember most of the mantle burners were at one time sold by the gas companies and the gas companies have had a pretty good idea as to what has been done in many customers' premises in the way of installing mantle burners. Now that the 5-and-10-cent stores and every other store sell mantle burners, it is pretty difficult to say how far they have replaced the flat-flames. But since the illuminating value has been reduced, it is pretty safe to say that there are not many people using flat-flames where they expect to get any great amount of illumination. They are using them in the way of small flames, burnt during the night, night lights and things of that kind, but I have never seen any exact data and I do not know whether anything has been actually taken up that would be comprehensive—I mean that would really involve a complete count of all the fixtures in every house" (pp. 966, 967).

Mr. Klump testified in case No. 108-A that the proportion of gas sold for consumption in open flame burners is below five per cent, probably one or two per cent (108-A, p. 52).

Mr. Freeman referred to an open flame burner called the Jumbo, which will burn perhaps nine feet of gas an hour. [fol. 3216] He added that all open flame burners do not burn exactly the same (p. 895). And Mr. Merrifield said that flat flame burners deliver anywhere from one to ten cubic feet of gas per hour (p. 237).

Mantle Burners:

"The luminosity of the mantle is in no way dependent on the luminosity of the gas, but upon the heat value of the gas, which, applied to the structure of the mantle, raises it to incandescence" (Merrifield, p. 1137).

Mr. Merrifield further testified that when gas is delivered to a mantle burner, and before it reaches the point of ignition, it "meets with a certain quantity of air, regulated so as to provide, upon ignition, what is known as a perfect combustion through a proper mixture of air and gas. The air has the effect of consuming the heavy hydro carbons without liberating free carbon" (p. 224).

Gas of 22 candle power requires 6 to 7 parts air to one of gas (Merrifield, p. 240).

The heavy hydrocarbons in the gas being destroyed in the air, there occurs in the mantle burner a blue flame, which distributes its heat to the material of which the mantle is constructed. This material is "merely certain earths of a rare kind which will withstand heat and which will become incandescent upon the application of heat to them" (Merrifield, pp. 224, 225).

The luminosity of the Welsbach mantle is dependent upon its incandescence, but this does not depend upon the illuminants which are some of the series of hydrocarbons in the gas furnished (Merrifield, pp. 228, 229).

The adjusting device upon a mantle burner is a sliding valve or shutter arrangement "whereby a certain quantity of air is admitted to mix with gas in the mixing chamber, which is located before the point of ignition. The adjustment is effected by observation" (Merrifield, p. 239).

Adjustment of a mantle burner may not be made so that at all times it is suitable for the use of gas maintained at 22 candle power at the testing station, and while an adjustment might be suitable if 22 candle power gas were furnished to the consumer constantly, the variation in the quality of the gas may be so great as to destroy the efficiency of the adjustment (p. 242), resulting, of course, in a character of service less satisfactory than that to be obtained through proper adjustments at all times.

Mr. Merrifield further thought that gas enriched with two gallons of oil and delivered to the mantle burner would produce the same character of luminosity through the mantle as gas which might have in it four gallons per thousand cubic feet (p. 226), and that it is not essential for the use of gas through a mantle burner that there be present in the gas any of the illuminants which are some of the series of hydrocarbons (p. 228).

"The effect of the admission of air is to destroy the luminosity of that 22 candle power gas, so that the mixture at the point of ignition does not show any evidence [fol. 3217] of the presence of illuminants" (Merrifield, p. 241).

Mr. Klump testified in case No. 108-A:

That there are different types of mantle burners, that the Bunsen burner has an opening permitting the entry of air to mix with the gas so that when the gas is lighted it is non-luminous, that the air being mixed with the gas before it burns, the particles of carbon are burned, thus preventing a deposit of carbon (Case No. 108-A, Record, p. 52).

That it is not the gas which gives light, but the heat of the mantle, which is an ash woven fabric, saturated with rare earth, and when it is heated to incandescence it gives forth light (p. 53, Id.).

That high candle power gas should not be used in the mantle burner, as the hydrocarbons may cause a blackening of the mantle by reason of lack of air in the burner (p. 57, Id.).

That since the standard in Philadelphia was changed from 22 candle power to 530 B. T. U. the cost of supplying mantles for use in the street lamps has been reduced 50 per cent (p. 58, Id.).

That a mantle light will burn less gas of 525 B. T. U. content than of 22 candle power gas (p. 293, Id.).

Though the most skeptical must admit that there is no comparison between open flame and mantle burners, the following observations may be briefly indulged:

Mr. Merrifield testified:

"Gas through an open flame burner has never as long as I remember, been considered as affording proper illumination" (p. 232).

Mr. Klump aptly said in case No. 108-A that there is about five times as much candle power in the mantles as there is in the corresponding quantity of gas (Case No. 108-A; Record, p. 53).

"My recollection of tests made on mantle burners by employees of the Public Service Commission in its laboratory in Walker street, New York city, is that gas burning through a mantle gives a light approximating 60 candle power, with a consumption of approximately three cubic feet per hour" (Merrifield, p. 238).

If this be true, each cubic foot of gas consumed per hour affords an illumination equivalent to 20 candle power when the mantle burner is used; whereas if five cubic feet of gas pass through an open flame burner per hour and give only 22 candle power, it is obvious that the illumination per cubic foot per hour is only a little over four candle power (p. 238).

Mr. Phillips stated the matter generally, "that the mantle light will give per cubic foot of gas supplied probably four to five times as much light as an open-flame burner under the present conditions" (pp. 512, 513).

[fol. 3218] Mr. Freeman testified in words or in substance as follows:

"With our present gas (in Providence) with a 5-foot per hour you will get from 100 to 110 candle power" on a Welsbach burner; but through an open flame burner "you would get only 10 candle power" (p. 886).

"Now, if you get ten times the amount of light on our gas with the same amount of money, a person would be foolish not to change over to a Welsbach burner, and the people are coming to Welsbach burner use. Some of them still do maintain an open-flame burner in the cellar, where they just want a little bit of light, enough to get around by, but other than that in the homes they are coming to Welsbach burner use" (p. 886).

On 580 B. T. U. gas the consumers in Providence got from 110 to 125 candle power in mantle lights (p. 889).

Usually on the 5-and-10 cent store mantles there is no air adjustment, and after five hours' use the light produced decreases. A good Welsbach burner will only lose 10 per cent of its lighting qualities after 1,500 hours' use (p. 893).

As above stated, Mr. Phillips testified:

"With a reduction in the quality to any figure which has been made * * * there will be still sufficient illuminating property to give a reasonably good light in the open-flame burner in any place where an open-flame is economical for use" (pp. 511, 512).

This fact disposes of any fear that the open flame burner must be scrapped, or that those who use such an appliance, exclusive or partially, will be deprived of the reasonable service to which they are entitled under all the circumstances incident to the interests of the consumers as a whole.

Use for Heating Purposes

Although the testimony was developed in greater detail with respect to the uses of gas for the purpose of illumination, perhaps because there exists a basis for comparison of quality and effect capable of appreciation without more than general knowledge of the subject, there is to be recalled the testimony of Mr. Woods that 80 per cent of the gas utilized in New York city is for heating, cooking and power purposes (p. 405).

It has been set forth above as the testimony of Mr. Phillips that "the preponderance of the gas now used is for heating purposes. * * * Manifestly, candle power is not the useful element in cooking operations. It is the heat produced. The same way in water heating; the same way in industrial operations" (pp. 474-a 475-a).

With reference to gas utilization, Mr. Cheney covered the situation, briefly and thoroughly, as follows (p. 484):

"I think that a heat unit standard today, a heat unit standard of some kind, is preferable to a candle power standard. It measures directly the quality of the gas in which the consumer is primarily interested, with only a few [fol. 3219] insignificant exceptions. A heat unit standard means that the gas will be fairly uniform as regards heating quality, and, therefore, that appliances, stoves, mantle burners, water heater, all devices which use gas for the purpose of utilizing the heat may be adjusted for that quality and will stay in approximately correct adjustment; whereas

2243

a candle power standard means necessarily that the heating content will vary from day to day and from month to month, and the ordinary domestic appliance is adjusted for and responsive to the heating content of the gas and is not affected by the candle power, with the result that as the heating content varies, the appliance is more or less out of adjustment."

To amplify the observations above on the subject of mantle burners and the mixture of air Mr. Cheney testified that a greater proportion of air is required for a rich gas (p. 491). Mr. Merrifield was specific that gas of 22 candle power requires six to seven parts of air to one of gas, while gas of 500 B. T. U. requires only three and one-half to four parts air (p. 240).

The effect of the introduction of air, according to Mr. Cheney, is to dilute the gas. "The nitrogen is an inert which has to be heated up. Nitrogen does harm. The oxygen, of course, is essential to cause the combustion. As far as the ordinary domestic appliance is concerned, probably the most serious difference is that it is difficult or it is impossible, I think, to get entrained as primary air so-called the air that is drawn into the Bunsen" (p. 492).

"Primary air is the air that is drawn into the Bunsen and mixed with the gas before it is actually used, so it is mixed with the gas before it escapes from the ports or little orifices in the burner. The secondary air is the air which comes from the air that surrounds the appliance, and just simply mixes with the flame as it burns after the gas has escaped from the orifices. It is impossible with rich gas to get enough primary air entrained to give you complete combustion, so that the flame has to rely to a large extent upon secondary air, which means that the combustion does not take place so quickly or so near the orifice or the ports of the burner from which the mixture escapes. So with a richer gas you get a longer, a lazier flame" (Cheney, pp. 492, 493).

Continuing, Mr. Cheney said (p. 494):

"The flame temperature, combustion temperature, is a function of the quality of the gas, but you get it concentrated in a hotter flame usually with the leaner gas where

you can get more primary air * * * Of more effect probably than the difference in flame temperature is the concentrated flame, more concentrated combustion, shorter flame, which permits you to get the apparatus or appliance to be heated in closer proximity to the flame and enables more efficient transfer of heat from the flame to the object to be heated."

Mr. Phillips agreed that "the lower heating value gas gives a shorter, more concentrated flame," adding, "The [fol. 3220] closer you can bring the cooking utensil to the top of the burner (as you can with the shorter flame) and thus get complete combustion, the better will be the efficiency of operation" (Phillips, p. 501).

"There is also a slight increase in the flame temperature in the lower heating value gas. * * * Welsbach mantle increases its brilliancy very rapidly with increase in flame temperature" (Phillips, p. 499).

Mr. Merrifield defined flame temperature as "the temperature given off by the gas upon combustion" (p. 1135).

"Flame temperature to the actual domestic consumer," said Mr. Phillips, "I do not believe outside of the mantle lights is of very great importance" (p. 501-a), and "in certain high temperature industrial operations that increase in flame temperature is also helpful" (p. 499-a).

"In high temperature industrial operations flame temperature is important, more important than in domestic, very much" (p. 502-a).

Colonel Betts testified:

"Illuminating gas of 500 B. T. U. has a slightly higher flame temperature than 600 B. T. U. gas * * * The chemical combustion is slightly different in its character. * * * In a 600 B. T. U. gas you have certain hydrocarbons that you have got to heat up, and you waste heat that way. * * * Flame temperature is entirely a function of the character of chemical combustion" (p. 1016).

Mr. Freeman affirmed that to a degree flame temperature is dependent on the heat content of the gas, and unqualifiedly stated that "it is dependent upon the specific heat roducts of combustion" (p. 868).

An appliance adjusted to 650 B. T. U. gas, Mr. Merrifield said, will function with 600 B. T. U. To quote Mr. Jenkins, the ordinary appliance "will take care of reasonably well a variation of about 40 or 50 or so B. T. U.'s" (p. 386). But as stated above, variation in quality—heat value—may be so wide as to result in destroying the adjustment.

The fact, therefore, that there must be an adjustment has direct relation to gas quality, and if the adjustment is to function serviceably it must be directed to a gas the quality of which will not vary beyond the points to which the adjustment is adaptable.

Mr. Klump testified in case No. 108-A (p. 46) that the principal advantage of B. T. U. gas over candle power gas is uniformity; that it can be burned with a fixed ratio of air; and that no further adjustment is necessary after once properly adjusted.

Hence it is that from the standpoint of adjustment, the question is as to the extent of possible variation in the quality of gas produced, and Mr. Phillips testified that "the variations under a candle power standard. * * * will [fol. 3221] be much greater than under a B. T. U. standard" (p. 488), and "the mere adoption of heating value, therefore, in substitution for the candle power is a step in the right direction, regardless of the lowering of the heating value standard" (pp. 510-a, 511-a). "With a lower heating value of gas. * * * you permit of a narrower variation in the quality of the gas" (p. 510-a).

Recurring to Mr. Cheney's testimony, which is quite along the same general lines, he indicated that "efficiency, as a measure of the useful work compared with the B. T. U. content of the gas, would increase as soon as you began to decrease the heat content," that "efficiency does not necessarily mean that you would perform a given operation with less gas" (p. 495).

Industrial Uses

As Mr. Phillips covered this subject quite thoroughly at one stage of his testimony, it seems unnecessary to here refer to the statements of other witnesses, but only to quote from Mr. Phillips. He was asked how the utility value of

22 candle power gas compared with that of 550 B. T. U. gas, viewing the matter from the standpoint of industrial users. His answer is as follows (p. 659):

"I would say that that would depend largely on the conditions under which the gas was used by the industrial consumer. The industrial uses of gas are very diversified and the conditions under which it is used are equally diversified. There is also the question of the care of the apparatus in which this gas is used. Now, you probably would find it in the larger industrial consumers that there will be some one especially delegated to keep the appliances in good adjustment practically every day. In such a case the appliance should be getting the maximum efficiency out of the gas regardless of the variations in quality which might take place from day to day or from season to season, because there is some one there to adjust the appliance. In such a case the reduction in heating value in most cases would be accompanied by an almost proportionate increase in the consumption of gas. That is, for the industrial user. In cases, however, where that was not so, where the appliance was not carefully adjusted from time to time, the greater uniformity due to the fact that a heating value standard was in operation and due to the fact that a lower heating value standard was in operation when comparable with the average heating value of the standard under the 22 candle power, there would be not a proportionate increase by any means in the quantity of gas required. That is in what I might say the low temperature operations.

"In the high temperature operations such as heat treating of steel, there will be, assuming that the furnaces used use the gas and air without pre-heating, there will be a slight improvement in efficiency even though the furnace is in good adjustment, due to the fact that there is a slight increase in flame temperature. It will not be large. There [fol. 3222] will be a small increase because there the difference between the heat of the flame and the heat of the object to be heated is comparatively small, and any increase in the flame temperature will give rise to an increase in efficiency. In your low temperature operations such as cooking, that is not an important factor.

"There is a third factor which is also of importance in connection with this, that in certain industrial operations where there is a burner whose position can be altered with respect to the product to be heated, that with the lower B. T. U. gas there is a shortening of the flame, and it is possible then to raise the burner or adjust the burner nearer to the product to be heated, with a consequent increase in efficiency. That is to say, the point of maximum efficiency of a burner is the point closest to the object to be heated at which perfect combustion will take place. When you get closer and incomplete combustion begins, then there is a decrease in efficiency, and as you go farther away there is also a decrease in efficiency. So that by bringing the burner, particularly in these industrial operations, closer to the work, it is possible in many cases to get an increased efficiency, but that taking generally the decrease in heating value is likely to be felt by the industrial users in their consumption of gas far more than with the domestic users."

Distribution

In the course of distribution, photometric tests for candle power of gas manufactured and distributed in the city of New York are made at stations established by the city at various points, approximately a mile from the place of manufacture.

The candle power of the gas manufactured to comply with the 22 candle power requirement is dependent "upon the possible losses through the line between the point of manufacture and the testing point." As further stated by Mr. Merrifield, "in warm weather it is not as necessary to produce as high a candle power at the plant as it is in cold weather, because the losses in the line are not as great" (p. 243).

Preliminarily, Mr. Merrifield had testified that "the illuminants in the gas are what are known as condensible vapors, and drop out in the system for various causes—friction on the line, drop in temperature and absorption by water in the line. * * * When we get down to winter weather, where we have atmospheric temperatures around the freezing point, or below, the loss in illuminants due to condensation of condensible vapors is much greater" than

when temperature is fairly constant around 65 to 70 degrees (p. 242). "So that 22 candle power gas might mean anything from 12 to 20 candle power at various points in the district" (p. 242½).

With respect to Mr. Merrifield's personal experience, he stated that he had produced 26 candle power at the plant which tested the same at the testing station as gas which he had produced of 22½ candle power (p. 243).

[fol. 3223] In answer to the question whether between the testing station and the point of consumption there might be greater or less variation than occurred between the place of manufacture and the testing station, Mr. Merrifield replied:

"It depends entirely upon conditions. It may be that in a scientifically designed system of distribution that the losses in the line might be directly proportional to the length of the line. Of course, it is all a question, really, of the amount of friction that the gas is subjected to in its passage, and the temperature conditions that are met with," adding that the real factor being temperature, it could not be anticipated and a remedy adopted which would necessarily mean a complete improvement in conditions at the terminus (pp. 244-246).

"A lowering of temperature has the effect of liquefying certain condensible vapors which are rich in illuminants. * * * They are collected from the system and form in a liquid (p. 246). * * * They are collected in devices known as drip pots, which are really wells installed below the level of the main installation, so that the forces of gravity tend to draw the liquefied deposit in the main in service into those receptacles (p. 247). * * * The removal of this liquid * * * is necessary so that the free passage of the gas will not be interfered with. If these liquids were left in the system, it would be possible to pick them up again by producing a leaner gas," or they might be picked up if the temperature radically increased (p. 248).

Mr. Merrifield testified that it was difficult to state, other than in a general way, what might be the variation in candle power as delivered to the consumer, assuming that 22

candle power is delivered to the testing station; that his observation in his own home has shown that gas testing at 21 or 22 candle power according to the city's record reached his home, about two miles distant, with a candle power of not more than 14 or 15 (pp. 248, 249).

Mr. Phillips testified (pp. 490-A, 491-A):

"Where gas is being produced under, say a 22 candle power standard or thereabouts, it would be impossible to say definitely what would be the variation without testing in the particular location. But in a general way I should say that to maintain that candle power there would necessarily be a variation of at least 40 or 50 B. T. U. in an extended district throughout the different parts of the year in order to maintain that candle power. In a concentrated district * * * that same ratio might not hold good, but I am speaking of the average condition. Probably 40 or 50 B. T. U. variation between summer and winter."

The problem of distribution has obvious relation to gas quality, for, as Mr. Phillips testified, "with a lower heating value of gas * * * you permit a narrower variation in the quality of gas" (p. 511). And again he said: "The variation under a candle power standard * * * will be much greater than under a B. T. U. standard" (p. 488). As stated by Mr. Jenkins (p. 372), under conditions [fol. 3224] which cause variation in gas quality "there would be more fluctuation in the curve of the candle power than there would be in the curve of the B. T. U."

It would serve no useful purpose to set forth in further detail the evidence with respect to the degree of variation in gas manufactured to a candle power standard,—gas requiring the use of enriching oils to produce the constituents known as illuminants,—or in gas manufactured to be of a fixed B. T. U. content; though pause may be made to refer to the statement of Mr. Jenkins that "the consumer eventually has to pay the total cost of making gas. If he does not get delivered to his appliances the full value of the gas as made at the works, and tested at the works perhaps, it seems to me that that is not a good quality of gas or a good method of testing to be used for the benefit of the consumer" (p. 331).

He further stated in effect that gas should be of such quality that the consumer gets the greatest amount of useful heat at the lowest cost, that the diluents or inert gases should be kept as low as commercially practicable, and that the gas should be so made as to insure the delivery to all consumers under all conditions of distance and weather, of the largest possible amount of heat units produced in the manufacture of the gas (p. 369).

It was his belief that under the use of the standard of candle power there has been a wide fluctuation, according to the weather and other circumstances, in the calorific value of the gas, and he further believed that there will be less fluctuation in gas measured for its B. T. U. value than in the same gas measured at the same time for its candle power value under reasonable changes in conditions, "like temperature and pressure and things of that sort" (p. 370).

The fact of variation in the course of distribution is of primary importance when it is realized that uniformity in quality is the first element of efficient gas service.

Uniformity of gas quality means substantial uniformity in its calorific quality because of its use for its heating value (Jenkins, pp. 368, 369).

"If," Mr. Jenkins testified further, "in order to retain a uniform candle power the calorific value varies, the actual service rendered the majority of consumers will be impaired" (p. 371).

Mr. Phillips testified that "since regularity is the most desirable quality of service and determines to a large extent the efficiency of service, the fact of a reduction which would tend to reduce the fluctuations in quality would have a very desirable effect" (p. 496).

"With a more uniform standard the industrial user would also obtain better service in that he would not find it necessary to make so many adjustments" (Phillips, p. 496).

In determining the point at which substantial uniformity of quality may be maintained, there is to be considered, in connection with the testimony that the lowering of the B. [fol. 3225] T. U. content operates to decrease the extent of

the variation in quality, that there is an approximate point where variation does not occur. According to Mr. Merrifield, blue water gas of 300 B. T. U. content is not apt to contain any of the constituents which may drop from the system in the course of distribution (p. 262), though carbureted water gas of 600 B. T. U. content does contain it. It seems that in reality it is not possible to supply any quality of gas without some variation at times; but the constancy of gas of 500 B. T. U. or lower can be better maintained than gas manufactured on the carbureted water gas plan of a higher B. T. U. content (p. 263), and while Mr. Merrifield does not say that 550 B. T. U. gas is the ideal point, his testimony is that it is easier to maintain constancy in gas of less than 550 B. T. U. than in gas of higher heating value (p. 264).

The desirability of a uniform quality of gas and the advantages to be derived therefrom are rather anticipatory, but the facts serve nevertheless to emphasize the importance of the problems of distribution in their relation to the subject of gas standards. Indeed, so entwined are the facts pertinent to this subject that it is difficult in the extreme to discuss them under various topics without repetition or anticipation of matter more properly to be weighed under another subject head.

Service Requirements Generally

Upon the subject of the requirements of gas service, it is stated in Circular 32 that there are three general requirements, as follows (Exhibit No. 5, p. 7):

"First, that gas of satisfactory and reasonably uniform quality and pressure be available to the consumers at all times and that such gas be correctly metered; second, that the price of gas be reasonable, though adequate to permit the maintenance of the company's equipment at a high state of efficiency and the earning of a fair return on the investment; and, third that all portions of the municipality or district which are sufficiently populous to warrant it be supplied with gas.

"The first of these general requirements, defines 'Standards for Gas Service,' which comprise the conditions which

must be defined in respect to heating value, purity, pressure, and measurement of gas and the relation of the gas company to its customers."

Circular 32 proceeds with this caution, however (p. 7):

"In the formulation of service rules and in the enforcement of such requirements it should always be borne in mind that these regulations are really a technical specification covering the quality of the commodity and the service to be supplied under a franchise which is in effect a contract with the people. These specifications should not be looked upon as police regulations of the State or the city, but rather as a part of a business arrangement between purveyor and users of gas; and if properly drawn they protect the interests of both parties to the contract."

[Rel. 3226] Pressure as Affecting Service

"Pressure is one of the most important factors in gas service" (Philips p. 626).

Mr. Merrifield said (p. 272):

"A certain pressure is necessary for adequate service; that is, the gas must be delivered at a pressure which will insure the delivery of gas in proper quantities for efficient service. * * * The Public Service Commission has certain pressure regulations governing that very subject, and the regulations in the Public Service Commission's old First District, which have not been modified or changed by the present Commission, provide for a minimum of two inches water column and a maximum of six inches water column, with a certain requirement as to variations between the minimum and maximum."

Mr. Jenkins pointed out that good service consists "of uniform quality of gas supplied under uniform pressure and through efficient appliances that were kept properly adjusted" (p. 367). But there are no pressure requirements in Massachusetts (p. 386).

Mr. Phillips referred to certain recommendations as to pressure requirements made by the Bureau of Standards

in its Circular 32 and quoted from page 74 (p. 632), to which reference can be made if this subject is of importance in this inquiry.

Tests

According to Mr. Merrifield, "the statute requires that gas, in order to comply with the 22 candle power standard, must be tested under conditions which permit the measurement of the illuminating value of the gas against that of candles which weigh six to the pound and burn at the rate of 120 grains of sperm per hour, the gas being passed through an open flame burner at the rate of five cubic feet per hour" (p. 255). The instrument employed in this test is the photometer, in the use of which the witness had experience over a period of nine or ten years (p. 256) and with respect to which he stated, "I haven't hardihood to give an efficiency rating to any photometer I have ever worked on" (p. 258). The witness continued: "I have tested gas for illuminating value and within a period of an hour have got differences of a candle and a half on the same gas by using different candles and these candles taken from the same box * * * Another factor * * * is the personal equation. The results secured, the ratings secured from observations on a photometer bar, are taken from observations made by the observer, whose vision controls his determination * * * I do not know any other person who has the same powers of vision that I have" (pp. 258, 259).

The calorimeter is the instrument for testing the heat value of gas (p. 265), and is more dependable (p. 259).

"The candle power test is a much cruder test than the calorimeter test" (p. 507).

[fol. 3227] **Stability of Product**

The unquestioned fact that "candle power" gas is of variable quality is indicated in the testimony of Mr. Merrifield that in practice, "22 candle power gas might mean anything from 12 to 20 candle power at various points in the district" (p. 242½).

Upon this point, Mr. Jenkins explained (p. 348):

"The idea, as I understand it, in the candle power days, of having a quarter-mile limitation for a testing station was to allow the gas to become settled. That is, to have dropped what it might drop on the way up, or rather not to give a fictitious value to the gas the consumer was getting by testing at the works, as experience has shown that it did deteriorate after it left the works."

Whether greater or less variation occurs between the testing station and consumer than between the place of manufacture and the testing station "depends entirely on conditions. * * * It is all a question really of the amount of friction that the gas is subject to in its passage, and the temperature conditions that are met with along" the line (Merrifield, p. 244).

Anticipating the more detailed discussion of the evidence to be later developed, it is now to be observed that "with a lower heating value of gas * * * you permit a narrower variation of the quality of gas" (Phillips, p. 511). Neither is that disputed; nor the further fact that uniformity of quality is the first element of good service.

Consumers' Service Complaints

As the purposes for which gas is used serve to indicate the quality which should be produced, so also is experience an important factor, even the experience of those not versed in the industry, but who utilize the service in one way or another. Evidence from such a source, however, is more apt to be from those who complain of the service, with or without just cause, and would be biased or otherwise valueless. However, there is available the experience of those who have dealt with the complaints of consumers.

Mr. Phillips said (p. 611):

"I have investigated the causes of complaints in a considerable number of cities at the request of the Public Service Commissions while I was with the Bureau of Standards. In no case have I found that low heating value was the just cause." He "found that complaints have been due

to various causes, among them, wide variations in heating value because appliances become out of adjustment. A very large proportion of them have been due to pressure (p. 612). * * * In some cases they have been due to inadequate local piping. * * * stoppages from corrosion, but in the main I should say that pressure conditions were the most common cause of complaint" (p. 613).

According to Mr. Merrifield, 90 per cent of the complaints of poor quality are due to defects in house piping (p. 200).

[fol. 3228] Colonel Betts referred to a number of general complaints which were made in Trenton about 1915. He said that they were from parts of the city where the houses were quite old and the pipes were quite small and clogged with accumulations of rust and other things. "The examinations and inspection of each complaint developed the fact that in a great many cases service pipes must be renewed (pp. 964, 965). * * * This examination, however, did develop a great many cases where appliances were not properly adjusted and where flat flame burners were being used where they expected to get some good amount of illumination" (p. 965). But a better feeling resulted through discovery and correction of the real causes of complaint.

A great many complaints came to the New Jersey Board as a result of the change in standard—the change in 1920 (p. 985). Colonel Betts having the view that, irrespective of what engineers and those informed upon the subject had to say about the composition of the gas, the heating value of various kinds of gas, etc., it would be well to determine what the customers themselves had to say in a comparison of the conditions existing before the change with those which occurred after the standard had been reduced (p. 986). He accordingly obtained some data. The cities of Newark and Jersey City advertised for complaints, (p. 987) after the 525 B. T. U. standard was fixed. The Commission employed a special man in Jersey to be at the place where people paid their bills to the Public Service Gas Company (p. 987) but after maintaining him there for two or three weeks without his getting any complaints, it was

decided he had been there long enough (p. 990). The man referred to was employed in June, 1921, that is, the spring of the year following the change of standards (p. 992).

As a result of the failure of the Public Service Gas Company to make adjustments in the appliances of its customers, there were a number of informal complaints to the New Jersey Board (p. 994). Representatives of the city and of the Commission made a joint inspection and all the complaints were cleared up except two, one of which was attributable to a poor gas engine installed by a consumer and could not be remedied (p. 996). The other was the case of a manufacturer of glass eyes, who insisted that with the lower B. T. U. standard he produced a cloudy eye, while a competitor of his, who used a higher calorific value gas, produced a clearer grade of glass eyes (p. 997). Low pressure areas were straightened out as a result of the investigation (p. 998).

Colonel Betts then referred to a memorandum of the complaints given to the gas inspector of Newark from August, 1919, to August, 1921, to show how the number increased at the time of the change of standard and decreased after conditions were remedied. These complaints were classified under two general headings, poor gas or insufficient gas (p. 999).

[fol. 3229] As to complaints in Providence, R. I., Mr. Freeman testified:

"We do not have any more complaints on 510 B. T. U. gas than we formerly did on 580 B. T. U. gas" (pp. 834, 835).

"All the complaints that could be attributed to the heating value of gas have been those of open flame burners" (p. 881).

The complaints on open flame burners were the main source of trouble incident to the change of standard in Providence (p. 878). With 580 B. T. U. gas, the people had been getting somewhere around 16 candle power and with 510 B. T. U. it is perhaps 9 or 10 candle power. "Naturally, people that had open flames made a noise about it, and we recommended to those people putting on Welsbach burners, and today we are using Welsbach burners in place of those open flames and getting remarkably good lighting with it" (Freeman, p. 879).

A number of the complaints by persons using open flame burners were attributed by the customers to what they called "poor gas"; but the only remedy for open flame burners, said Mr. Freeman, is to do the same thing the electric light companies did in changing from a carbon lamp to a Mazda lamp, that is, change from an open flame burner to a Welsbach mantle light (p. 885).

Mr. Freeman further testified that he had made it a practice to get acquainted with the company's customers (p. 881), and he instanced the complaint of Mr. C. W. Adams, who stated he could not obtain as good heating result on the new standard as on the old. Upon investigation, Mr. Adams said he had not had any trouble at all at his house, but that he had told Mr. Freeman that he did not like 510 B. T. U. gas as well as 580 (p. 882). In fact the trouble with Mr. Adams' range was a weak flame, which was adjusted so as to boil a quart of water in five minutes on the back burner and in four minutes on the front burner.

Mr. Adams finally said he was "very much satisfied" (p. 883). This is just an instance of some of the complaints.

Other complaints arise sometimes due to insufficient gas supply,—because of trouble in the supply pipe, or because the burners themselves require a complete cleaning out. "Occasionally we find a cock has got grease in it and the grease has got into the cock orifice and plugged it up so the gas cannot get through" (Freeman, p. 884).

In December, 1920, the Providence Gas Company circularized its 68,000 customers, asking them for complaints. Those resulting were about 3 per cent of the total (p. 890).

"Of the complaints of poor gas service reaching the department," in Massachusetts, Mr. Jenkins said, "examination showed no instance in which the dissatisfaction of the consumer was due to the change in standards or as to the value of the standard" (pp. 309, 310, also pp. 308-316).

The pertinence of the subject of complaints in a discussion of gas standards is found in the fact stated by Mr. [Vol. 3230] Phillips that "the complaints that are received under a lower heating value gas are fewer than under high candle power gas" (p. 702).

Heating Standards Fixed by State Commissions as of April, 1921

State	Previous minimum	Standard monthly average	Date effective	Minimum	Present maximum	Standard monthly average	Date effective
Arizona	....	....		550		600	5/ 1/15
California				540	600	570[1]	9/ 1/19
San Francisco						550	9/ 1/21
San Diego						540[1]	2/ 1921
Colorado				525		575	1/ 1/17
Connecticut	530	575	8/ 1/15	528		[1]	10 1 18
District of Columbia				550		600	9/ 1/14
Georgia—							
Atlanta, Augusta, Savannah				550		575[1]	1918
Illinois		Low pressure gas		530		565	11/ 1 14
		High pressure gas		520		530	11 1 14
Indiana	550	600	7/1915	540	600	570[1]	5 1 20
Vincennes		550	9/24/18	500		525	9 1 20
Maine	....	....		495	555	525	7 1 21
Maryland	....	....		550		600	7 1 15
Baltimore				490	520	500[1]	10 1 20
Massachusetts		16 candle power 1892		528		[1]	1 1 18
Michigan (Certain cities)				510	565 (weekly av.)	530[1]	1921

[1] Standards adopted since Jan. 1, 1918.

Heating Standards Fixed by State Commissions as of April, 1921—Continued

State	Previous minimum	Standard monthly average	Date effective	Minimum	Present maximum	Standard monthly average	Date effective
Missouri				520		570	10/ 1/15
Cape Girardeau				(5% from av.)		450[1]	12/18/20
Montana	450	475	4/30/14	445	505	475[1]	1/ 1/21
Nevada				500		550	9/ 3/11
New Hampshire	550	600	2/ 1/14	550		565	4/ 1/17
New Jersey	550	600	11/15/11	525		[1]	11/ 1/20
New York							
Second District—16 c. p. Coal Gas 18 c. p. Mixed Gas 20 c. p. Water Gas			6/27/07	555 (3 day av.)		585	1/ 1/17
North Carolina				510	570	540[1]	1/ 1/21
North Dakota				500	550	525[1]	1/ 1/21
Oregon			Oil Gas	550		570	7/ 1/13
			Other Gas	550		600	
Pennsylvania[2]	520	570	4/ 9/14	500		520[1]	12/13/20
Rhode Island						510[1]	5/19/20
(Providence only)		580		550		600	6/15/12
Washington				500	530	[1]	1/ 1/21
Seattle				520	560	[1]	1/ 1/21
Spokane				450	475	[1]	1/ 1/21
Tacoma				(4% below av.)	(5% above av.)		
Wisconsin	550	600	7/24/08			520[1]	9/ 8/20
Canada		520	7/ 8/15			450[1]	5/24/19

[1] Standards adopted since Jan. 1, 1918.
[2] By-Product Coke Oven Gas 20 B. T. U. lower.

But it is desired to invite particular attention to the following places where B. T. U. standards have been fixed, though they will be discussed hereafter in some detail.

New York:

While case No. 1502, Public Service Commission, Second District, entitled "In the matter of a conference of representatives of gas companies on the subject of standards for the measurement of the value of gas," was not admitted in evidence in this case, the order entered therein, dated October 11, 1916, is a matter of public record. It fixed the standard of gas in the Second District at 585 B. T. U., which standard has been effective since January 1, 1917, [fol. 3231] when it superseded the standards previously in force, namely, 16 candle power for coal gas, 18 candle power for mixed gas, and 20 candle power for carbureted water gas (Cheney, p. 451).

Though the record of the proceedings in case No. 2235, Public Service Commission, First District, "In the Matter of the Hearing on the Motion of the Commission as to the Standards for Measurement of the Quality and Power of Gas Manufactured, Distributed or Sold by Gas Corporations within the First District, and the Rates or Charges for such Gas Service based upon such Standards," was denied admission in evidence, the order entered October 13, 1917, was received. Hearings had been held in September, 1917. The order gave to the companies the option of adopting a standard of gas of 650 B. T. U., which was said to represent as nearly as could then be determined the thermal content of 22 candle power gas, and it was further ordered that, if the thermal content of the gas distributed was below the standard of 650 B. T. U. a discount should be allowed upon bills to consumers equivalent to the reduction in the thermal content from the standard fixed by the order.

The order in case No. 2320, Brooklyn Borough Gas Company, referred to above, was entered on July 2, 1920. Among other things, it directed that the company be "authorized and required not later than October 1, 1920, to change its standard from its present 22 candle power standard to the British Thermal Unit (B. T. U.) standard, the number of heating units to be furnished to be not less than

525 B. T. U. per cubic foot." This order was stated to be made upon the express condition that the Company would make such reduction in the maximum rate "as shall be warranted by the economies effected by such change of standard."

Case No. 108-A, entitled "In the Matter of the Kings County Lighting Company," involved the same subject of inquiry as the present case, being restricted, however, to the Company named. The record in that case was received in evidence here. It appears that an order was entered therein on March 23, 1922 (amended April 25, 1922), fixing the standard of 525 B. T. U. for gas manufactured and sold by Kings County Lighting Company, "in lieu of a 22 candle power standard."

The present standards for gas in New York are thus found to be 585 B. T. U. in the former Second District of the Public Service Commission, 525 B. T. U. in the territories served by the Brooklyn Borough Gas Company, and the Kings County Lighting Company, and 22 candle power elsewhere in the city of New York.

Massachusetts:

The Commission was materially aided in its inquiry by the availability of Mr. Charles D. Jenkins, who testified as to the investigation and experience in Massachusetts. He was in charge of the investigation conducted there in 1916, as a result of which a 528 B. T. U. standard was fixed, becoming effective January 1, 1918 (pp. 306, 387), and sup- [fol. 3232] planting the standard of 16 candle power which had been the requirement during a great many years (p. 351).

New Jersey:

Colonel Betts testified fully as to the standard adopted in 1920 by the New Jersey Board of Public Utility Commissioners of 525 B. T. U., with a minimum of 515 B. T. U., the previous standard having been "600 B. T. U., with a minimum which shall never fall below 550 B. T. U.," and which had been fixed by order of October 17, 1911, in imitation of the action taken by the Wisconsin Public Service Commission.

Providence, R. I.:

It was through the testimony of Mr. Freeman that information as to the gas industry in Providence was developed. The company there produces gas to meet a requirement of 510 B. T. U., which has been the standard since May 17, 1920. Previous to that date the standard was 580 B. T. U.

Philadelphia, Penna.:

Mr. Klump in case No. 108-A testified in some detail as to conditions prevailing in Philadelphia. There is also in evidence the report of the Gas Commission to the Mayor and Council of the City of Philadelphia, dated May, 1921 (Exhibit No. 8, p. 7), wherein it was stated:

"If a satisfactory readjustment with the United Gas Improvement Company can be obtained, the Commission recommends the following program in order to modernize the present gas plant and to provide the best and cheapest gas service for the people of Philadelphia:

"(1) The continuation of 530 B. T. U. heating value as the standard of gas quality, with power conferred upon a regulatory body to change such standard if conditions in the future so require. The Commission is of the opinion that such a standard will provide a better and less expensive gas per heat unit than that required by the twenty-two candle power standard, that the vast majority of gas consumers will be benefited thereby and that those disadvantageously affected consume not more than five per cent of the entire amount of gas supplied," etc.

England:

It seems that under the Gas Regulation Act of 1920, "each undertaking is left free to choose and declare the heating value of the gas which it intends to supply. Under this Act calorific standards ranging from 400 B. T. U. to 550 B. T. U. have been declared, and gas of all heating values between these limits, and in a few cases even below 400 B. T. U., is today being furnished alike by municipal corporations and private companies. (Exhibit No. 7, p. 1.)

[fol. 3233] Experience under Heating Standards

It seemed highly important to procure the testimony of witnesses qualified to inform upon standards in force elsewhere and the results experienced. Mr. Phillips testified in details as to the practice in England, and Exhibit No. 7 is his report to the American Gas Association in 1921 upon the subject of "English calorific standards and their governmental regulation". The connection of Mr. Jenkins with the investigation and experience in Massachusetts, of Mr. Freeman with the Providence Gas Company and of Colonel Betts with the inquiries and results in New Jersey has been mentioned above. Their testimony and that of others will now be briefly referred to, though certain phases of their experiences not already mentioned will be reserved for discussion hereafter under specific topics. Advantage will be taken of the opportunity to incorporate parts of their testimony having general bearing and which may or may not have been referred to elsewhere.

Massachusetts Investigation

Mr. Jenkins testified:

"The Legislature passed an Act by which the Board of Gas and Electric Light Commissioners in those days was empowered to determine the number of B. T. U.'s which should be required" (p. 305), and the investigation covered a period of eighteen months (p. 321).

"Nineteen companies were specified and designated as being subject to the investigation," (p. 305), "which was intended to be on a large practical scale, with the companies cooperating to find the best or most desirable quality of gas to make" (p. 306).

To witness' mind the candle power standard fixed by the Massachusetts statute was "a rather crude method of valuing gas," (p. 330) and he was anxious for the Board to test by a rational method, that is, for heat units rather than candle power (p. 329).

"The accuracy of the method of testing candle power (by sperm candles) was not as fine as it might have been, as some other methods of valuing gas might be" (p. 331).

"As I see it, the consumer eventually has to pay the total

cost of making gas. If he does not get delivered to his appliances the full value of the gas as made at the works, and tested at the works perhaps, it seems to me that that is not a good quality of gas or a good method of testing to be used for the benefit of the consumer" (p. 331).

Though one test of calorific variation showed a change of 9 B. T. U. between the works and the testing station, witness' recollection of later work was that a figure between 4 and 5 B. T. U.'s of variation was the "one to be aimed at" as being a possible "minimum loss" (pp. 347, 348).

"Experiments were made during the period of 16 candle power gas to determine what was its actual heating con-[fol. 3234] tent (p. 354), but "the B. T. U.'s of the 16 candle power gas would vary according to the quality of gas" (p. 355).

"If all the gases tested had been exactly 16 candle power, the equivalent in calorific value would have been 560.9 B. T. U" (p. 356).

"What we tried to do (in the course of the investigation) was to have the gas companies make gas to a calorific value standard, that is, make a gas whose value would be determined by a calorific test, test for B. T. U.'s; and that may or may not be the same character of gas that they would make if they were making it to a candle power standard" (p. 358).

In furnishing a heating power gas, the primary purpose is to give a heating content rather than an illuminating content (p. 360).

"What we were aiming at was to find what quality of gas was going to give the most efficient service to the consumer, and it does not follow in my mind that a high B. T. U. gas is the one that the consumer wants" (p. 360).

"It was desirable to get to the consumer the greatest amount of energy for his dollar" (p. 361).

Referring to his report to the Massachusetts Board, Mr. Jenkins called attention to his note on page 21, "which I wanted to impress on the various companies, that good service consisted of uniform quality of gas supplied under uniform pressure and through efficient appliances that were kept properly adjusted. That seemed to be, from my ex-

perience during the investigation, the thing to be aimed at" (pp. 367, 368).

Certainly the greatest percentage of gas used is for its heating value (pp. 368, 369).

"The gas should be of such quality that the consumer gets the greatest amount of useful, available heat at the least cost." • • • "This means that the diluents or inert gases should be kept as low as commercially practical, and that the gas should be so made as to insure the delivery to all consumers, under all conditions of distance and weather, of the largest possible amount of heat units produced in the manufacture of the gas" (p. 369).

"If you measure the gas for its B. T. U. value, there will be less fluctuation than there will be of the same gas measured at the same time for its candle power value, under reasonable, of course, changes of conditions, like temperature and pressure and things of that sort. That is, if you make two tests at the same time, candle power and B. T. U., and the conditions do change so that there is a variation in the candle power, there will be less change in the B. T. U.'s" (pp. 370, 371).

"Even under the stress of abnormal times the calorific value has remained exceedingly constant, while the candle power has followed the usual fluctuation experienced in changing weather. Uniformity of calorific value is to be desired, for the larger proportion of gas is used as a source of heat, and a uniform quality of gas is the first element of [fol. 3235] good service to the consumer. If, in order to retain a uniform candle power, the calorific value varies, the actual service rendered the majority of consumers will be impaired" (p. 371).

"My experience has been that the candle power was, with very much difficulty, kept uniform during the year" (p. 374).

Mr. Jenkins' report of the investigation was presented and marked Exhibit No. 1 for identification, but was not received in evidence (p. 319). With respect to it, he said: "I do not know that it is necessary for the record, but it might be interesting for the engineering department to study."

With respect to the Massachusetts investigation Mr. Cheney said (p. 459):

"The special significance of the results in Massachusetts to me is because the operations ran parallel as to time and contiguous as to location between the companies which did change and those which did not, and there were enough of both and they were sufficiently interspersed and intermingled so that it is beyond human probability that economic conditions, weather conditions, and those other factors which are ordinarily apt to vitiate the significance of data, did not affect both groups equally and simultaneously. So that having all other conditions the same, if any effect there was due to the change in standards it should have been disclosed by the actual results."

Providence Standard:

Mr. Freeman, Engineer of the Providence Gas Company, of Providence, Rhode Island, had had intimate experience in connection with the service of gas produced in Providence under a B. T. U. standard. He testified that when he became Engineer of the Providence Gas Company in 1919 the standard was 539 B. T. U. monthly average, but that since May 17, 1920, the standard has been 510 B. T. U. monthly average (p. 828).

In connection with the circumstances of the change in standard, he stated that about three weeks before the termination of his company's oil contract it was informed that the Gulf Refining Company would be unable to renew, that accordingly the market was combed for an oil supply and 1,200,000 gallons were finally located at the price of 15½ cents a gallon, which meant that the price of gas would have to be substantially increased and that in view of the limited supply there would have to be a reduction in the heat value of the gas (pp. 829, 830).

The matter was laid before the State Commission and hearings were held. In view of the emergency, the Commission permitted the putting into effect of the new standard. Further hearings were held in June or July following (p. 830) and the Commission authorized the permanent continuance of the new standard. This decision was appealed, and was affirmed by the State Supreme Court about November, 1921 (p. 831).

At the present time the Providence Gas Company is sending out 50 per cent coal gas and 50 per cent water gas (p. 880).

[fol. 3236] The change from 580 to 510 B. T. U. was made in practically a week's time (p. 887).

A man of intelligence could be instructed in a day's time to make proper adjustments from 650 to 550 B. T. U. (p. 876).

The Providence gas on a 510 B. T. U. standard is so hot that they are using steel pilot tubes in the Welsbach mantle, because experience showed that brass pilot tubes became clogged through zinc oxide (p. 887).

Previous to witness going with the Providence Gas Company a survey of open flame burners had been made, and witness' information is that perhaps 5 per cent of the customers there used them (p. 891).

The witness emphatically feels "that the customer is getting more on a 510 B. T. U. gas than they would be on 580 B. T. U. gas." The witness' opinion would not be affected by the production of 10 per cent coal gas and 90 per cent carbureted water gas (p. 898).

The heat content of the coal gas produced, without enrichment, is perhaps around 570 B. T. U., and the water gas, without enrichment, between 295 and 300 B. T. U. per cubic foot. "Theoretically water gas is about 315 to 316, but you cannot obtain that in good practice" (p. 899).

Sometimes witness' company does not use any oil in the water gas, the supply being enriched with the coal gas (p. 900).

Industrial consumers are taken care of by the same men who take care of the household consumers, but they use a better grade man on industrial work.

The peak load of the day varies at different times of the year, but it runs from about 5:30 to 7:15 p. m. (p. 902).

At the time of the change of standard, some of the consumers went over to the use of electricty for lighting purposes (p. 904).

(The witness has made 22 candle power gas in New York city (p. 905).

There is no trouble with the 510 B. T. U. gas with reference to the condensibility of hydrocarbons in the mains.

"Our mains are dry now, where formerly they were good and wet." "We are pumping less drippage." "The drippings out of the holder would be less on 510 than 580" (p. 907).

"There is no strict relation between candle power and heat value. There is a wide range" (p. 913). "My judgment would be, it would be from say 630 up as high as 680 B. T. U.'s"—practically a 50-point variation. The variation would "probably be a whole lot more than that on consumers' premises because if you are running on a 22 candle power gas you drop a lot of hydrocarbons in your mains and then you come along with the gas and pick up those hydrocarbons. The chances are you might chase that B. T. U. on your consumer's premises at times up above 700, and at other times it may be below 600 when the condensation is dropping out" (p. 914).

[fol. 3237] New Jersey Inquiries:

As stated above, Col. Philander Betts, Chief Engineer and Chief Inspector of the Public Utilities Commission of the State of New Jersey, was called as a witness in behalf of the Commission to testify as to what had been the experience in New Jersey under the B. T. U. standard there in effect.

He testified that the New Jersey Act of 1911 gave the Commission "the power to fix standards for service" (p. 938). Thereafter a hearing was had on the matter of gas standards and the witness drafted a set of rules which followed almost exactly the Wisconsin rules (Id.), and a 600 B. T. U. standard was fixed with a minimum, below which the gas should not fall, of 550 B. T. U. (p. 940).

During the war the companies were allowed to drop the standards of gas down to a point "which would be considered by them to be as satisfactory as possible and that would allow them to remove some of the toluol from the gas;" but all except two of the companies "restored the standard within a couple of months' time." The Public Service Gas Company, however, did not do so (p. 941).

"Very close to three-fourths of the gas produced in the State is furnished by the Public Utilities Corporation," and, due to the large amount of gas that is purchased from

the Seaboard By-Products Company about 50 per cent of the gas distributed by it is coal gas (p. 954), though the proportion varies from season to season somewhat. The gas so furnished by the Seaboard By-Products Company is manufactured by the coke oven process. The proportion of water gas furnished sometimes rises as high as 60 per cent of the total, and this is at the time of the greatest demand (p. 955).

At the time of the increase in the price of gas oil in 1919 and 1920, investigations were held throughout the country (p. 942) and in New Jersey there was a hearing for the purpose of determining whether gas companies should be allowed to produce gas "under conditions which would call for less oil for enriching purpose" (p. 943).

It seems that this investigation resulted from a communication from the New Jersey Gas Association. At the time a number of the companies had asked for increased rates, and the hearing was held for the purpose of going entirely into the question of the standard (p. 957).

The Board concluded that the standard should be changed for the purpose of conserving oil and of reducing the cost of production (p. 958). There was then fixed an average standard of 525 B. T. U. (p. 959), with a minimum of 515 (p. 961).

"The thing that impressed itself upon us was the absolute necessity of a gradual change and the absolute necessity of a complete house-to-house canvass of all customers' premises, with a view to seeing that the appliances were adjusted properly" (pp. 963, 964).

[fol. 3238] In New Jersey, due to lack of labor during war time, many companies discontinued the work of free service on customers' premises, but the scheme of doing such work has again been established (p. 968).

Asked as to what provision was made by the Commission at the time of the order reducing the standard from 600 B. T. U. to 525 B. T. U. with respect to the manner of the reduction, the witness read from the third paragraph of the Board's decision dated August 3, 1920, as follows (pp. 970, 971):

"In putting the new standard into effect, it will be necessary to adjust many of the appliances now in use in the

premises of the consumers * * * The change in standard should be gradual and should be made in what would approximate equal steps * * * The work of adjusting appliances on consumers' premises is to be executed by the respective gas companies without expense to the consumers" (pp. 970, 971, 972).

One of the reasons why the change was made beginning in August was that "in cold weather the service pipes sometimes clog up, and we get those complaints, we get them at that time in the year" (p. 978).

The consumers don't know anything about it except that they have what they call "poor service, poor gas, no gas, no pressure; all sorts of ways of saying the same thing" (p. 979).

The customer does not complain about the "clogging up due to oil that has been dropped out of the gas at times of low temperature," (p. 979) "but we have found that to be one of the things which causes partial clogging up of service pipes" (p. 980).

In view of these conditions in cold weather, "we did not want to have complaints that might arise from this change in standard complicated or mixed up with complaints that might come from some other source" (p. 981).

Subsequent to the reduction in standard, Newark presented a petition, in which Jersey City joined later, asking that the standard be restored to 600 B. T. U. (p. 1007). Hearings were held and an order issued Nov. 29, 1921 (pp. 1008, 1009). In connection with the investigation, the Public Service Gas Company requested letters from various municipalities and "they express without exception satisfaction with the standard as it now is. The only places where you find any discordant element at all is in two or three cases where the municipal authorities themselves had some complaints because the companies have not made extensions to serve prospective new customers. I have been over all these letters and this is the only thing of the kind I can find in here" (pp. 1009, 1010).

These letters were filed as a part of the case in the New Jersey inquiry and as showing why there should not be any further change in the standard. They were all written between August 20 and September 9, 1921 (p. 1010). They

were practically all from municipal authorities, and the [fol. 3239] witness quoted from some of them (p. 1011).

In conclusion Colonel Betts testified:

"The gas having higher calorific value under ordinary methods of getting it is a sooty gas compared with the gas of a lower heating value. I think that is one of the most important reasons why the change should be made.

"But there is another thing. For years I have been of the opinion * * * that some of these days we would have gas somewhere nearer 450 than 600 or 650 or 670 that we have been having in almost all cities * * * The Board of Trade in England sets a standard to fit particular conditions (p. 1037) * * * with the idea of getting the greatest economic benefit * * *

"Now, it is on that account that I think that we have got to come to what will be called economic standards * * * The best economic balance that we can get in a combined mixed gas plant would be nearer 450 than it would be something considerable higher. If that is so, then the lowest cost would come from a lower heating value gas" (p. 1038).

Brooklyn Borough Gas Company:

The change of standard "was effected by an order of the Public Service Commission which modified the standard and fixed the standard of 528 B. T. U.'s per cubic foot for that company. The company organized a force of men for the purpose of making wholesale readjustment of appliances to meet the leaner gas and within a space of four weeks — at the time that the change was made there were a number of places that had not been covered, and within a space of four weeks, practically all adjustments had been made, and I say that because, after four weeks there was an entire cessation of complaints to the Commission upon poor gas supply from that territory" (Merrifield, p. 278).

The Brooklyn Borough Gas Company had about 20,000 consumers (p. 281).

New York and Richmond Gas Company:

It seems that for a period of some two years the New York and Richmond Gas Company has been furnishing gas

of varying B. T. U. content, averaging about 550 or 540, without authorization, and instead of 22 candle power gas (Merrifield, p. 273).

This company serves the territory in which is located the home of Mr. Merrifield who testified with respect to it that "for practical purposes in my home I have not been able to detect any difference in the efficiency of that gas compared with the gas previously furnished by the company when it was complying with the 22 candle power standard" during 1919 and prior thereto (p. 274).

Mr. Merrifield judged from the effect upon his appliances that the change from 22 candle power gas to that of a B. T. U. content was effected suddenly, and he said:

[fol. 3240] "The adjustment which had previously met the conditions of the gas supply was not proper for the newer gas, so I had to readjust my appliances" (p. 274).

In the instance of this company Mr. Merrifield further testified:

"I know that complaints from the Public Service Commission referred to the company caused the correction of the cause of the complaint" (276).

New York, Public Service Commission, Second District:

It will be recalled that Mr. Cheney was with that Commission at the time of the change of standard to 585 B. T. U., and he said (p. 468):

"As to the service supplied after the change from the candle power to heating power standard I can say that as far as could be determined by me on tests which we made of the gas following up of complaints which came as to service, there were no complaints which could be attributed, which were at any rate justified by the change to a heat unit standard."

"It was rather common for complainants to say that the gas was poor. * * * Investigation of those complaints always developed that it was not because the gas itself was poor, or that it did not have enough heating quality but that the pressure was poor, or the service was plugged up, or the appliances were out of adjustment, or perhaps dirty. * * * When corrected, the same gas that had

been complained of before was entirely satisfactory." (p. 474).

During the war, upon occasion, in several places, the quality of the gas fell "considerably below 585 for some period of time" (p. 477). "The B. T. U. over in Rensselaer were down, as I recall it, in the neighborhood of 525 for a matter of weeks and months" (p. 478). In other places it was 540 and 550. But "no complaints or any other information or disclosures that came to us or which we could dig up indicated that there was any lack of satisfactory service, satisfactory utilization by the consumer from these lower quality gases" (p. 479).

Efficiency of Service Under Heating Standard

This subject admits of several divisions, but an exhaustive discussion will not be attempted here.

"Efficiency in heating value," said Mr. Phillips, "naturally means energy input as compared with energy utilized" (p. 505-a). It means "the quantity of heat actually put into the material that you are heating" as compared with the quantity of heat that you get from the burner (p. 755).

"Laboratory results have shown an almost constant efficiency per B. T. U. though in the English laboratory tests it is perhaps well to call attention to the fact that in higher B. T. U. there has been a decrease in efficiency down to a certain point. * * * I mean B. T. U., in excess of 600" (Phillips p. 505-a).

[fol. 3241] Mr. Freeman had never made any laboratory tests for utilization of gas on varying heat content, but his information was, from studies made by the Public Service Engineer of Providence, that in laboratory tests burner efficiency is practically the same with gas of 580 B. T. U. and of 510 B. T. U. content; "but that does not take into account the efficiency of practical application of the gas, which is an efficiency of practice and would be concerned with how much the customer actually utilizes the gas irrespective of the burner efficiency" (p. 862).

The witness illustrated his point by considering a cigar lighter in a cigar store, which has a certain efficiency (p. 862), but "its efficiency of application is practically a zero

per cent. Now, as far as that cigar lighter goes, it does not make any difference practically what gas is on it at all. Now, that is one extreme" (p. 863).

Going to the other extreme, he took the case of a steam boiler which has a certain efficiency, and said that if the steam is being taken from the boiler continuously the boiler will have a hundred per cent efficiency of application, whereas if it pops off steam it has less efficiency of application.

"So that in the use of gas you have got (p. 863) the application or the practical application of the gas varying from zero per cent. efficiency up to 100 per cent. efficiency" (p. 864).

He further instanced a laboratory test where, when the water comes to boil, the gas is cut off, rating this at 100 per cent efficiency of application; "but the housewife in utilizing that gas does not use it that way" (p. 864).

The important point to witness' mind is the ratio of heat applied to the ratio of heat utilized (p. 865).

He assumed the further instance of a woman in Providence boiling water on 580 B. T. U. gas. Assuming that it begins to boil in four minutes, it may be that the gas will not be turned off for five or six minutes (p. 865). If she turns it off in five minutes there has been a waste of gas for one minute Assuming the same circumstances with the use of 510 B. T. U. gas and that the pot would begin to boil 4½ minutes (p. 866); then if gas is turned off at the end of five minutes there is a waste of one-half minute In each of these cases the burner efficiency would be practically the same: "it would be somewhere in the neighborhood of 35 or 40 per cent;" improvement "on very good adjustment up to 50." If the burner efficiency were not the same it would not be off more than one or two per cent (p. 867).

It seems that Mr. Merrifield conducted certain minor experiments in his home about which he testified and in which he took the B. T. U. as furnished to the Commission by the Department of Water Supply as being equivalent to the B. T. U. furnished in his house upon the days that he was making the tests, and upon that predicated his calculations. He testified that he got a very wide range

of efficiency in his appliance. "I have had an efficiency of 34 per cent, which was the maximum that I secured, and [fol. 3242] I have gotten an efficiency of 16 and a fraction per cent, which was the minimum that I secured. On each of these occasions I did what I considered or thought was possible to secure a perfect mixture (p. 1160) and perfect combustion of the gases at the point of admission. But I had this wide range, this unexplainable wide range of efficiency upon the same device" (p. 1161).

Thus there are to be taken in account the efficiency of the gas, the efficiency of its application, and the efficiency of the appliance to determine the efficiency of service and the standard for manufacture, and, inevitably, the conclusion must be in favor of gas of a B. T. U. content lower than that generally found in gas of 22 candle power.

Effect of Decrease in B. T. U. Content Upon Quantity Consumption

Mr. Phillips testified that "so far there has been little, if any, increase in gas consumption with the reductions in heating value which have taken place * * * with the ordinary consumer" (p. 503-a).

This witness pointed out, however, as follows:

"The laboratory experiments quite generally have shown an increase proportional or nearly proportional; that is, an increase in consumption to do the same amount of work proportional or nearly proportional to the reduction in the heating value. That is to say, that a heat unit gives about the same efficiency. In these laboratory tests, however, it must be kept in mind that they have almost exclusively been the heating of water on top burners of a gas stove and that after each experiment the burners have been carefully adjusted to give the maximum efficiency; and it also must be kept in mind that the average consumer does not use gas only for water heating or that the conditions on his premises are comparable with the laboratory. The laboratory affords very excellent opportunity for studying certain conditions but those conditions must necessarily be kept constant, and the variation in one of them be allowed to take place in order to get some idea of the variation due to that particular condition, and as a result it has been almost im-

possible thus far to duplicate domestic consumers' conditions in the laboratory.

"Certain laboratory tests have shown an improvement in efficieney with a lower heating value of gas, and there have been a few which would seem to show a slightly poorer efficieney under certain conditions. But I believe that taking it as a whole and in view particularly of certain laboratory tests which we have made in connection with this Baltimore investigation which I believe are about as exhaustive as any that have been made in this country, also taking into mind those that were made in England by the Fuel Research Board and by the Institution of Gas Engineers, I believe [fol. 3243] that you can say pretty positively that laboratory results have shown an almost constant efficieney per B. T. U., though in the English laboratory tests it perhaps is well to call attention to the fact that in higher B. T. U. there has been a decrease in efficieney down to a certain point."

Mr. Freeman's testimony is important upon this point. He produced a tabulation entitled "Comparative Send-outs," which was received in evidence and marked Exhibit No. 11 (p. 848). In regard to it he testified:

That he, personally, had drafted it, (p. 835) as the result of his individual study, in one column setting down "the increase in send out in the year 1920, as compared with the year 1919" (p. 838).

"Now, to one who has not had this experience that we have had here in Providence, he might assume that immediately when you reduce your heating value of gas that you would get an increase in consumption of gas on the part of the city" (p. 840).

"Taking the send-out of gas for the six weeks' period just previous to the time we reduced the heat value in our gas, we find * * * that in the year 1920 we sent out 897,000 cubic feet more per day than we did in the year 1919, both years being on 580 B. T. U. gas" (p. 840).

"This table indicates that after the change in B. T. U. went into effect from 580 to 510, that taking the first six weeks' period after that time in the year 1920 as compared with the year 1919, that 706,000 cubic feet of gas more were sent out in 1920 than in 1919" (p. 842).

He further pointed out that, comparing periods of eighteen weeks each, in 1920, wheen 510 B. T. U. gas was furnished, 693,000 cubic feet of gas more were sent out than during the corresponding period in 1919, "showing that there was no increase in the consumption of gas by reason of a B. T. U. reduction from 580 to 510 heat units" (p. 843).

Here the witness stated that a tabulation over a long period of years would not be more accurate, as it would involve economic changes (p. 844), concluding that "if running on a 580 B. T. U. gas we show a constantly greater amount of gas used in 1920 over 1919, immediately when we change the B. T. U. from 580 to 510, if there was an increase in use, the send-out should have gone up, but it did not come up any more than what had been obtaining just previously to that time" (p. 847).

Mr. Freeman affirmed that there was a common belief that on a reduction in the thermal content of gas there is a corresponding increase in the volume of gas used per consumer (p. 850). He had had occasion to make two studies with respect to increase or decrease in consumption by particular groups of individual.

The first study is headed "Comparison of Sales on 580 B. T. U. and 510 B. T. U." (Exhibit No. 12, pp. 851, 856) [fol. 3244] and was obtained from the consumers' ledgers. There were tabulated ten household accounts taken from the same pages and lines of each of thirteen ledgers for the thirteen districts (p. 851). The page and the line were selected arbitrarily; 127 customers were considered out of the total of 140 selected, some of the 140 customers having at times a blank account (pp. 852, 853). The periods covered included the five months immediately preceding the change and the five months immediately following (p. 853); also the corresponding periods a year previously. For the five months' period just before the time of B. T. U. change, there was an increase of 8.8 per cent in volume over the corresponding period in the previous year, (p. 854) during both of which 580 B. T. U. gas was supplied.

Applying this rate of increase to the consumption for the five months beginning May, 1919, the consumption in the period beginning May, 1920, should have been 1,497,740 cubic feet, but it was in fact 46,000 cubic feet in excess of that, or 1,544,500 cubic feet, which is "an apparent in-

crease in the use of gas by reason of B. T. U. reduction of 3.1 per cent" (p. 855). This relates to volume.

There was an additional similar tabulation with respect to the Oakland Villa plat (Exhibit No. 13, Record, p. 861), where 48 consumers were considered (p. 857), this being a random selection of location, rather than a random selection from all the ledger customers. Instead of showing a normal increase in consumption in the five months' period after the change of standard, the tabulation showed an apparent decrease in sales of 6.7 per cent (p. 858). These consumers were householders (p. 859), but possibly some of the consumers mentioned in the preceding table were industrial users. But the big industrial consumers are carried in a separate ledger (p. 861).

Mr. Freeman, having been asked in the course of his examination to submit tables showing comparative sales per meter per year, subsequently wrote the Chairman of the Commission under date of April 4, 1922, enclosing tabulation showing "Comparative sales per active meter" for the Providence Gas Company for the years 1916 to 1921, inclusive. The letter and the tables were copied into the record, beginning on page 1046. In his letter Mr. Freeman stated, among other things:

"As I stated on the stand, I do not feel that the average consumption per active meter on various standards of gases for different years of the life of a company are comparative so as to indicate the effect of any change in the use of gas by reason of change in quality of gas supplied. It is a known fact that the general tendency of gas users is to increase their use of gas by reason of the fact that any particular customer will install additional gas-using appliances from time to time. * * *

"I feel that the first exhibit (Exhibit No. 11) which I presented before you, which showed the total send-out of our company just before the time of B. T. U. change and [fol. 3245] just after the time of B. T. U. change, is the criterion of the situation for the reason that economic conditions just before and just after any particular time, especially when this time is of short period, are practically the same and are, therefore, eliminated and the same applies to the additional use of gas by customers and the industrial

use of gas. If there had been an increase in use of gas by reason of a reduction of heat value, it should have manifested itself immediately after the B. T. U. were changed.

"On this particular table which I am sending to you it is noticeable that January, 1921 sales per meter are lower than those previous years when the B. T. U. value was higher; this same applies to February and March; it does not apply to April; it applies to May; June the sales per meter in 1920 and 1921 were as low or lower than previous years on higher B. T. U.; July, 1920 and 1921 were as low practically as previous years; the same applies for August; it is practically so for September; October, 1920 and 1921 are slightly higher; November, 1921, is practically the same as those of previous years; and the same applies for December. As I said above, I don't think this particular table is conclusive, (although the general trend shows there has been no general increase in sales per meter), in eliminating any of the conditions of which I have spoken" (p. 1049).

(Mr. Merrifield also had had occasion to prepare tabulations upon this subject (p. 1057) "from data taken from the annual reports of the Brooklyn Borough Gas Company and from records of gas quality furnished the Commission by the Department of Water Supply, Gas & Electricity of the City of New York." He testified that "the tabulations attempt to show the relation which gas consumption bears to variations in heating values of gas. They cover a three-year period, including 1919, 1920 and 1921. During this period the quality of the gas with respect to its heating value varied, the rate charged for gas varied and there was also a variation in the average sales per meter" (p. 1104); that "in this tabulation an attempt has been made to show the effect on gas consumption for different periods as compared with other periods wherein the quality of gas varied" (pp. 1105, 1106).

The tabulations were attached to a report by Mr. Merrifield headed "Memorandum for Chairman Prendergast; Subject: Studies of Gas Consumption in its Relation to Gas of Varying B. T. U. Content," which was dated, March 1, 1922 (p. 1111). This report together with the tabulations were copied into the record beginning on page 1113.

Mr. Merrifield stated in the report that it was of interest to show "how reduction in illuminating and heating values

of manufactured gas affect the average sales per meter'' (p. 1113).

He said: ''The tables which are arranged by monthly averages afford a ready basis of comparison for the three-year period'' (p. 1114); that ''an analysis of the figures will show a marked increase in average monthly sales per [fol. 3246] meter during the early months of 1920, as compared with the corresponding months of 1919. During this period, no change occurred in the quality of gas furnished, nor in the rate charged'' (p. 1115).

On August 1, 1920, the 528 B. T. U. standard was fixed and the gas rate was increased from $1.15 to $1.40 per thousand cubic feet; this rate prevailed until May 6, 1921, when it was changed to $1.50, the rate being decreased to $1.35 on Sept. 23, 1921 (pp. 1116, 1117).

''With the exception of the months of April and September, each month during 1921 showed a decrease in average meter sales, as compared with the corresponding months of 1920 (p. 1116). * * * The luminosity of the gas during the first four months of 1921 was 50 per cent less than that furnished in the corresponding period of 1920. This decrease in luminosity was accompanied by a 16 per cent reduction in the heat content of the gas. While the figures representing the illuminating and heating values would indicate a lower quality of gas during the 1921 period, nevertheless, the average monthly meter sales decreased by 2.8 per cent as compared with the corresponding period of 1920, when a supposedly higher quality of gas was furnished. * * * There was, however, an increased rate charged during this period of 1921, that is, $1.50, as compared with $1.15 per thousand cubic feet in 1920 (p. 1117).

''The greatest increase in average monthly sales took place when the rate was $1.10 per thousand cubic feet, which gas approximating 630 B. T. U. cubic foot. A change to $1.15 per thousand cubic feet and approximately 575 B. T. U. gas was accompanied by a somewhat lower percentage increase in meter sales. The change to $1.40 per thousand cubic feet and 528 B. T. U. per cubic foot, although followed by an increase in average monthly meter sales, such increase was noticeably lower than the increase of the prior periods. As already stated, the average sales per

meter decreased during 1921. The establishment of the $1.50 rate and the subsequent reduction to $1.35 per thousand cubic feet did not apparently affect the situation in any manner" (p. 118).

Mr. Merrifield's experience in his home affords valuable data. As a result of the change of standard from 22 candle power to 525 B. T. U. his gas bills have been no higher (pp. 290, 291).

Colonel Betts said:

"The practical results, however, as shown by some figures I have here * * * indicate that the results that you get in the ordinary kitchen under ordinary conditions are not at all proportional to the reduction in the heating value of the gas. When it comes to industrial uses, such as tempering and work of that kind in these furnaces that are used in a good many industrial methods, you have those things as a rule under the watchful eye of an expert and he is at all times, if he is on his job, trying to keep the thing in close adjustment. So there you will get a result in many appliances, and you get results that are perhaps very [fol. 3247] closely proportioned to the heating value of the gas itself" (pp. 1018, 1019).

He has reference to a tabulation upon the consumption of gas for domestic purposes by 750 customers in Newark during the first seven months of the years 1917 to 1921, inclusive (Exhibit 14; p. 1040).

"What all these figures indicate to me is that there seems to be a normal increase in consumption on the part of the same customers year by year of some figure that is not far from 6½ to 7 per cent" (pp. 1024, 1025).

That table showed that in 1919 there was 5.06 per cent less volume of gas used than in 1918, that in 1920 the increase over 1918 was .21 per cent, and an increase for 1921 over 1918 of 6.34 per cent; that the increase in volume used in 1920 over 1919 was 5.11 per cent, and in 1921 over 1919, 12.01 per cent; and that the 1921 increase over 1920 was 6.57 per cent.

A similar table was produced with respect to Jersey City, which, the witness said, showed a little different condition (Exhibit 15; Record p. 1040). These 750 consumers were factory employees, etc. (p. 1028). The increase in

1918 over 1917 was 6.53 per cent, which compares with the Newark district; and 2.56 per cent in 1919 over 1917. The 1920 increase over 1917 is 5.66 per cent. and the 1921 increase over 1917, 8.12 per cent (p. 1029). "It would seem," said Colonel Betts, "as if the ordinary addition might have been at least 5 per cent. Now if that is so, you see the actual increase in 1921 over 1920 (when the change of standard was made) is only 2.32 per cent," meaning the increase due to the change of standard (p. 1030).

Mr. Cheney had made a study of the Massachusetts investigation, and he testified (p. 460):

"The first year that the 19 companies changed to a heat unit standard and the average B. T. U. content of their gas was decreased approximately 7 per cent from what it had been previously, the consumption per consumer increased 6 per cent. The same year, the other companies which did not change experienced a 5 per cent increase in consumption. * * *

"In the second year of the experiment the companies operating on the heat unit standard" experienced a 5 per cent increase of consumption, and the increased consumption per consumer of the other companies which had made no change in gas quality was 10 per cent (p. 462).

Mr. Jenkins testified:

After the fixing of the 528 B. T. U. minimum standard in Massachusetts, "we still continued to observe the working of the standard, and one method that we took which seemed to be interesting at least, was to tabulate the percentage increase of consumption per meter as compared with the percentage variation in the decrease of the B. T. U. for several [fol. 3248] companies. I have here a tabulation of some of the companies that I would like to leave with the Commissioners. I think it might be interesting, in which for the years 1916 and 1917 are given the percentage of the increase in consumption. Then for 1918, the first year which the B. T. U. standard was in effect, is given the same figures of increased consumption and decreased B. T. U.'s and also the variation in B. T. U.'s during the year, and so on up to 1921. I have here nine companies which are more or less typical, but they were chosen at random" (pp. 306, 307).

The tabulations referred to were contained in a statement which read in part as follows:

The results of operation of nine of these companies have been further studied to determine, if possible, the relation between lower B. T. U.'s and increased consumption. From the tables following there appears apparently little relation, for increased consumption is not always in the same ratio as the decreased calorific value. This study covers a four-year period and gas companies of various kinds, small and large, coal, water and mixed gases, and one company distributing gas under high pressure.

Mr. Jenkins also testified that "I think a fair deduction of those figures will show that there is practically no relation between the increased consumption per meter by the change, variation, if there be any, in the B. T. U.'s" (p. 320).

It was in the course of the examination of Mr. Cheney that the Assistant Corporation Counsel observed that the question is a laboratory question, that if we have not any laboratory data or some actual experimentation with the gas, the conclusions of witnesses are valueless (p. 448). On the contrary, however, the testimony above indicates very clearly that in so far as is concerned the ratio of consumption to decrease in calorific value the question has to do with the actual conditions on consumer's premises, and they are shown to be very different. Mr. Phillips found "that the coils of water heaters in a great many cases were covered with a carbon deposit," "that the mantles in the houses were badly carboned," that many of the cooking utensils were covered with a deposit of carbon—"so they became poor conductors of heat." These conditions, he said, constituted "the reason for the fact that tests so far have not shown an increase in consumption, or, where there have been increases, but very small increases in consumption, where the heating value has been reduced within the limits with which we are familiar" (pp. 1236, 1237).

"If," said Mr. Phillips, "every consumer's appliance was constantly adjusted to the maximum of service, then, naturally, you would get an increase in the consumption, but the fact is that the consumers' appliances are not so" (p. 1238).

He testified further :

"There is a clear distinction between the usual way in hich the ordinary average consumer uses the gas for daily perations and the tests which may be made in the labora-

tory." In boiling operations, for instance, the onsumer does not usually turn down the gas when the me comes. In the Baltimore tests "we have attempted to etermine how much he wastes in that way and we have ound that it is possible for him to continue boiling with ne ninth of the gas that is ordinarily used" (p. 753).

The observation to be made in this connection is per-ectly obvious—that with a gas less expensive of produc-on, and accordingly less expensive to the consumer, there ill be a saving in the cost of the quantity wasted; and even there were an increase in the quantity consumed, there ould be a proportionate reduction in the cost to the con-mer.

Conservation of Resources

While this has a very practical application, available me and space will not permit of detailed discussion. The ubject will be found briefly outlined, however, in the fol-owing extracts from Mr. Phillips' testimony:

"We must look in the future to a radical curtailment of he use of oil in the gas industry, unless the gas industry nd the public are prepared to pay an exceedingly high rice" (p. 576).

"Most of the foreign fields, with the exception of per-aps Mexico, the oil produced from them would naturally e expensive on account of transportation costs. The Mexi-an oil * * * is mostly of a quality which is not suitable or gas making purposes because it is a heavy oil which ontains in most cases large quantities of sulphur which ractically preclude its use for gas making" (p. 585).

"It is suggested that the oil shale deposits in the western art of this country may be a substitute" (p. 587).

"The cost of producing shale oil would probably be fairly igh and put it beyond range of economical use in water as manufacture" (p. 588).

"I believe that it will be necessary to reduce the quan-ity of oil used in gas manufacture" (pp. 601-602).

"* * * Supplies of petroleum in the United States are being rapidly exhausted. * * * Petroleum products are coming into greater and greater demand" (p. 602).

"* * * The result of this would be that while it may be possible to use some quantities of oil their use will have to be substantially restricted" (p. 603).

See also Mr. Phillips' "Discussion of Lower B. T. U. Standards for Gas" (Exhibit No. 6).

Future Development of the Gas Industry

There are "three possible lines for development of the gas industry" Mr. Phillips testified,

"The first * * * is the simple reduction of the use of oil in carbureted water gas manufacture to perhaps a gallon a thousand, making a gas of 350 to 400 B. T. U. or perhaps [fol. 3250] even blue water gas of 300 B. T. U. Such gas is practicable for use" (p. 605).

"That would involve the extension of plant, larger distribution systems and various other factors which I believe make such course impracticable when carried to the last degree" (p. 606).

"The second would be a complete substitution of water gas plants by coal gas plants" (p. 607).

"The supply of large quantities of coal gas or coke oven gas, unless there is a very favorable market for coke, is unwise unless there is a water gas plant in addition to take up the quantities of coke which are produced in a coal gas plant."

"The third * * * the most logical course of development of the gas industry is the building of coal plants in the future in connection with the water gas plants, making the relation of coal gas plants to water gas plants such that the total quantity of coke or nearly the total quantity of coke produced in the coal gas plants will be used in the water gas plants for the production of water gas" (p. 608).

"That will offer the most stable condition of gas price and probably the most satisfactory one to the consumer" (p. 608½).

"A gas plant should be built not for the present day but for a period of time in the future looking forward to the future economic conditions" (p. 610).

Fortunately, this subject also is considered in Mr. Phillips' "Discussion of Lower B. T. U. Standards for Gas" (Exhibit No. 6), and it is not deemed necessary to further outline it here.

Standard to be Adopted

"It is elemental that the standard of the gas should be established on the heating basis" (Cheney, p. 444).

"I think 650 B. T. U.'s is too high. It is too rich a gas for the best utilization and most satisfactory results to the consumers" (Cheney, p. 489).

"I think you will increase the efficieney of utilization as you come down until you have gone something less than 600, but I don't know how far that continues" (Cheney, p. 496).

"You can get satisfactory service, you can get good utilization and perform the work that the customer wants to perform with gas down as low as 500 B. T. U., I am sure. I haven't any reason to suppose that it stops there, but my experience does not permit me to express a very positive opinion beyond that point" (Cheney, p. 496).

"There is no question, I think, that the 550 B. T. U. would be more efficient in the ordinary domestic appliances" than gas of 22 candle power. "Utilization and efficieney would be much better" (Cheney p. 498).

Referring to the industrial user, Mr. Cheney said that under certain conditions, "you will get more out of a cubic foot of 22 candle power gas than you will out of 550" B. T. U. gas (p. 499).

[fol. 3251] Mr. Phillips testified (p. 492-a):

"There are a number of factors that should be considered in adopting a B. T. U. standard. The cost of the service to the consumer, the satisfaction of the service,—to a certain extent it would be necessary to consider the uses to which in a general way the gas is put—the appliances, that is to say, in a general way, their character and their range of adjustability, because, of course, no standard should be fixed which would be uneconomical for the consumer to use, looked at not only from the point of view of the efficieney of the gas itself, but of the necessity of supplying new apparatus in his home which would entail

expense to him for which he would not be compensated by increased efficiency or some such condition."

Assuming the production of 20 per cent coal gas and 80 per cent carbureted water gas, Mr. Phillips further testified.

That for New York city "a standard of between 525 and 570 B. T. U. actual average maintained would give a satisfactory and economical service, for the reason that gas of heating value within that range would be barely dry and would not drop out large quantities of these condensible hydrocarbons, because the quality would have been reduced by the reduction in the quantity of gas oil used per thousand cubic feet" (p. 495-a).

He also stated that the effect of the change from 22 candle power to between 525 and 570 B. T. U. would be to decrease the unavoidable variation in quality, adding "and since regularity is the most desirable quality of service and determines to a large extent the efficiency of service, the fact of a reduction which would tend to reduce the fluctuations in quality would have a very desirable effect" (p. 496-a).

Better service would result to industrial as well as domestic consumers. "There are certain industrial plants that perhaps find it possible to have an expert continually watching the apparatus in use and keeping it adjusted for the heating value of the gas which may be supplied on that particular day, but with a more uniform standard the industrial user would also obtain better service in that he would not find it necessary to make so many adjustments, and to the industrial user who did not make continual adjustment of his appliances the improvement in service would be very considerable" (pp. 496-a, 497-a).

But, said Mr. Phillips, "you can obtain good service with gas of any heating value, provided your appliances are properly adjusted and you do not go down to below say 450 B. T. U. because that would necessitate a redesign of appliances" (p. 509-a).

Further in his testimony, Mr. Phillips recurred to the serviceable range of between 525 and 570 B. T. U. which he had suggested, and said:

"My belief would be that a standard towards the lower part of that limit would be the more advisable; that is, 530

to 540 B. T. U. and I may qualify that further by saying that my reason for that is that a better degree of uni-
[fol. 3252] formity will be possible with a standard of about that figure than would be with a higher standard" (p. 615).

In adopting a standard, "it is usual to fix an average monthly value (p. 619) * * * There is also a minimum figure fixed in some cases, being a requirement that never must the heat value fall below that, and in other cases that the daily average must never fall below that figure" (Phillips, p. 620).

Mr. Phillips believed it would be the best policy to fix a minimum, an average and a maximum heating value, though a minimum and a maximum are sufficient. It "has a good public effect to fix a monthly average which the company may live up to" (p. 621). He said a satisfactory standard would be 525 B. T. U. minimum, 550 average, and 580 maximum (p. 624).

While Mr. Merrifield would not say that 550 B. T. U. is the ideal standard, he testified that with such gas "it is much easier to maintain constant quality in the gas delivered to the consumer than it is with gases whose B. T. U. content may be higher than 550 B. T. U. per cubic foot" (p. 263).

To have the best quality of gas, it is not necessary that it should be of high heating value, testified Mr. Jenkins (p. 362). As the result of the investigation conducted by Mr. Jenkins in Massachusetts, he recommended to the Board that a standard of 525 B. T. U. be adopted. He described this as the "reasonable point" (p. 367). Asked if he would be inclined to recommend a higher B. T. U. standard than 525, he replied:

"If the question were opened up (in Massachusetts) I do not know what I should do. I doubt if I should recommend any increase" (p. 389). Mr. Woods testified that the standard which he thought would be most suitable for present adoption in New York city should be "not over a monthly average of 550 B. T. U.'s" (p. 398). He further said, however, that "I think within ten years we will be selling somewhere between 400 and 450 (B. T. U. gas) in New York City" (pp. 399, 400).

But he would not recommend for New York city the immediate adoption of a standard of 525 B. T. U.'s or lower (p. 400).

Mr. Klump testified that his "experience in the last few years has indicated to me that a standard less than 570 is desirable (p. 425) * * * I am of the opinion that with the present processes of manufacture and the present conditions, a standard between 500 and 550, depending upon the local conditions, is advisable." He had recommended a standard of 530 in Philadelphia "under the conditions that they were operating at that time" (p. 426).

Method of Changing Standard

As testified by Mr. Phillips, if there were a change of standard from 22 candle power—to 550 B. T. U. for instance—there should be a general adjustment of customers' appliances. "The company should prepare for a change, in my opinion, some time in advance, and should train a corps of men who will be capable of going to the consumers' [fol. 3253] houses and adjusting appliances. There should be some publicity given to the proposed change so that the people would know what to expect and what they should do." He explained that there should be then a reduction of probably 30 B. T. U.'s in quality, the gas being maintained at that point for at least three weeks, that there would be an increase of complaints and the company should adjust the appliances of those who complained free of charge. Upon a further reduction of 30 B. T. U.'s adjustments should be continued. After the reduction has been made to the standard determined upon, "there should be a house to house canvass and every appliance should be carefully adjusted to the new quality of the gas supplied. If such is done there should be no serious difficulty and the service obtained with the new standard should be excellent" (pp. 625, 626).

Mr. Merrifield testified that he believed "it is possible to change from a 22 candle power gas to a B. T. U. gas * * * without any inconvenience whatever to the consumer, if the change is made in steps" (p. 282). The duration of time for each step would be a question dependent upon the size of the organization and the length of time it would take to do the work of readjustment (pp. 284, 285).

Mr. Jenkins said (p. 386):

"If a change is to be made involving 100 B. T. U.'s, it would be my impression that it might be desirable to make it in two steps."

Review of the Testimony

As a result of the investigation, it may be said

1. That the witnesses whose testimony has been discussed above were men of experience and intimate knowledge of the gas industry.

2. That "the test for candle power" is "obsolete" (Little, p. 1803).

3. That the "modern method takes into account the heating quality of the gas as expressed in B. T. U. (Little, p. 1803).

4. That elsewhere the B. T. U. standard is generally in effect.

5. That candle power "is not an intrinsic quality of the gas. It is the light that you are able to produce when you use it in a certain particular burner" (Phillips, p. 506).

6. That the candle power standard is representative of its value to the consumer only when used through an open flame burner.

7. That only a very small proportion of the gas utilized is through the open flame burner.

8. That all other gas appliances, domestic and industrial, for cooking, heating and power purposes, function to employ the heating power of the gas not upon its luminous constituents.

9. That there is no direct relation between candle power and heating power, though 22 candle power gas may be said generally to have a heat content of about 650 B. T. U.; and [fol. 3254] gas of 550 B. T. U. content "gives a light of approximately 16 candle power" when used through the open flame burner (Merrifield, p. 231).

10. That "candle power" gas is of variable quality and though gas may be produced to test at 22 candle power it may be of only 12 candle power when delivered to the consumer (Merrifield, p. 242½), and the degree of its variation "depends entirely on conditions " (Merrifield, p. 244).

11. That "with a lower heating value of gas * * * you permit a narrower variation of the quality of gas" (Phillips, p. 511.)

12. That uniformity of quality is the first element of good service.

13. That it is not essential to good service that gas be of high heating power.

14. That in the manufacture of gas to meet a 22 candle power requirement, the average quantity of oil used per thousand cubic feet of gas produced is about 4.1 gallons.

15. That in the manufacture of gas to a standard of B. T. U. content less than 650, it would be necessary to use a less quantity of oil.

16. That the calorimeter test results in a more accurate estimate of the quality of gas delivered to the consumer than the photometric test.

17. That in the course of distribution the luminous constituents of gas manufactured to a candle power standard through the use of enriching oil being condensible vapor are subject to being dropped—for various causes.

18. That if the consumer does not have delivered to his appliance the full value of the gas produced at the works, the gas is not of good quality, nor is the method of testing of advantage to the consumer.

19. That uniformity of gas quality means substantial uniformity in its calorific quality (Jenkins, p. 368).

20. That "if, in order to retain a uniform candle power the calorific value varies, the actual service rendered the majority of consumers will be impaired" (Jenkins, p. 371).

21. That "regularity is the most desirable quality of service" (Phillips, p. 496).

22. That "with a more uniform standard the industrial user would also obtain better service" (Phillips, p. 496).

23. That reduction of the candle power of gas by 75 per cent would reduce the heat value only about 8 or 10 per cent.

24. That open flame burners are not used where any great amount of light is expected to be obtained, even 22 candle power gas being regarded as a low degree of luminosity, especially in comparison with the light to be obtained with the mantle burner.

25. That where gas is used for its heating power, it is mixed with air, and even if any part of the luminous constituents in 22 candle power gas produced at the works is [fol. 3255] not dropped from the system in the course of distribution, "the effect of the admission of air is to destroy the luminosity of that 22 candle power gas" (Merrifield, p. 241).

26. "That the mantle light will give per cubic foot of gas supplied, probably four or five times as much light as an open flame burner" (Phillips, p. 512).

27. That the use of high candle power gas in mantle burners may cause a blackening of the mantle by reason of lack of air in the burner (Klump, Case No. 108-A, p. 57).

28. That even if higher candle power illumination may be obtained through the use of higher heating power gas through a mantle burner, such gas is subject to greater variation in quality with resultant impairment of appliance adjustment.

29. That an adjustment will usually accommodate a variation of 50 B. T. U. (Jenkins, p. 386).

30. That variation of more than 50 B. T. U. may be reasonably expected in gas of over 600 B. T. U. content; but gas of serviceable quality may be produced so as not to vary more than 2 per cent.

31. That there is "a slight increase in flame temperature in the lower heating value gas," and "in high temperature industrial operations flame temperature is important" (Phillips, p. 499).

32. That the "Welsbach mantle increases its brilliancy very rapidly with increase in flame temperature" (Id.)

33. That "illuminating gas of 500 B. T. U. has a slightly higher flame temperature than 600 B. T. U. gas" (Betts, p. 1016).

34. That "laboratory results have shown an almost constant efficiency per B. T. U." (Phillips, p. 505).

35. That appliance efficiency varies and is considerably below 50 per cent (Merrifield, p. 1160, Freeman, p. 867).

36. That there is considerable waste in the use of gas by domestic consumers.

37. That the experience in localities under a B. T. U. standard has been satisfactory; that complaints are no more numerous, and are not due to the quality of the gas furnished.

38. That there is no increase in gas consumption with reduction in heating value, so far as the ordinary domestic consumer is concerned, but the contrary may be expected in industrial operations.

The basic points in the foregoing digest of the testimony suggest the following questions:

Question No. 1. What are the advantages and disadvantages of the 22 candle power standard?

Question No. 2. What are the advantages which accompany a change to a heat value standard?

Question No. 3. Would a change from a 22 candle power standard to a heat value standard affect adversely the gas service in the City of New York?

Question No. 4. Will a heat value standard lower than what may be considered as the heat value equivalent of 22 candle power gas cause increased consumption on the part of gas users?

[fol. 3256] Discussion and Conclusions

Question No. 1. What are the advantages and disadvantages of the 22 candle power standard?

Answer. The principal advantage of a 22 candle power standard is its luminosity when used through an open flame burner. With a suitable burner, this gas will give a light equal to 22 candles when used at the rate of 5 cubic feet per hour. The amount of gas used in this manner is, however, but a small percentage of the total gas used. The com-

monly used gas mantle, for instance, requires a heat gas for incandescence and not an illuminating gas. By far the greater percentage of gas is used under conditions where its heat value is the principal factor in its efficiency. Manufactured gas is composed of a number of constituent gases. The constituents which produce luminosity are also possessed of high heating value, so that a 22 candle power gas is usually accompanied by a high heat content which can be utilized to practically full advantage, if proper scientific control is applied. It must be understood, however, that under a candle power standard, it is not possible to furnish gas of uniform composition, for the reason that the constituents which provide luminosity are the least permanent and are easily subject to condensation. Climatic changes are in great part responsible for variations in the quality of a gas of this kind, regardless of manufacturing methods. The fact that 22 candle power gas is of variable composition prevents the maintenance of a balanced condition of gas burning devices except where they are used under technical supervision. This supervision can not be applied by the ordinary gas user. As a consequence (under a 22 candle power standard), the gas burning appliances are frequently out of adjustment, resulting in imperfect combustion, which causes waste, and the deposit of soot upon mantles, burners, cooking utensils, and the premises.

Question No. 2. What are the advantages which accompany a change to a heat value standard?

Answer (a). Under a standard of 550 British Thermal Units or less per cubic foot, the percentage of non-permanent gases is to a great extent eliminated. Climatic changes have much less effect upon the gas composition and the manufacturer can be assured of practically exact conditions of production at all times from the raw material used. The constant quality of the gas means a balanced adjustment of gas burning devices and a consequent minimizing of waste during combustion.

(b). While practically all grades of oil are suitable for the production of heat value gas, there is a narrow range of selection of oils from which 22 candle power gas can be produced.

Question No. 3. Would a change from a 22 candle power standard to a heat value standard affect adversely the gas service in the city of New York?

Answer. No! The change from a 22 candle power standard to a heat value standard will not adversely affect the [fol. 3257] gas service in the city of New York. Adequate gas service depends upon the maintenance of proper pressure conditions and a constant quality of gas. The change to a heat value standard will have no effect whatever upon the maintenance of adequate pressures and the gas produced under a reasonable heat value standard will maintain its constancy within very narow limits.

It must be remembered that the amount of gas used for illumination through open flame burners constitutes but an insignificant fraction of the total gas used, and where the heat value of gas is the determining factor of efficiency, constancy of quality is most essential. The heat value of gas is the prime factor of efficiency where gas is used through mantle burners, gas radiators, gas ranges, gas stoves and industrial appliances, and while the supply of gas remains adequate, and its quality remains constant, these various devices will function efficiently.

Question No. 4. Will a heat value standard lower than what may be considered as the heat value equivalent of 22 candle power of gas cause increased consumption on the part of gas users?

Answer. No! There is nothing to indicate that a change in standard would be accompanied by an increased use of gas, except in the case of utilization in a large industrial enterprise where scientific control was established. Where a fuel engineer is employed, it can be assumed that the use of gas would be proportionate to its British Thermal Unit content. This does not apply to the domestic users of gas, the reason for which may be considered in this manner.

(a). Under a 22 candle power standard, a great deal of the gas is wasted because of the variable quality of the gas, which disturbs the efficiency of the air adjustment.

(b). As individuals, we test the value of gas service by its household usefulness. The value in industry, under the experts employed for the purpose, means little or nothing in comparison. The household runs without any such ex-

perts and requires gas which will be of as uniform a quality as it is possible to secure and which will contain the utmost heat efficiency possible under home conditions. The extra heat units in a gas which do not reach the boiling pot under the household's ways of doing things, are wasted, and money paid for them is wasted.

The proof available shows that no matter what the B. T. U. contents of the gas may be, the consumer does not burn that gas directly. What is really used is a mixture of air and gas, and this mixture takes on additional air at the point of its being lighted, in order to obtain perfect combustion. This means a mixture of air and gas, producing at the burner orifice a heat content ranging from 130 to 150 B. T. U. per cubic foot. While the quality of the gas remains constant, the heat value of the mixture is maintained, but as the gas varies in quality, the air in the mixture becomes disproportionate to the gas, causing a reduction in heat value at the point of ignition. Constant gas [fol. 3258] carries with it a proper equality of air in the mixture. In the event that the mixture contains an excess of air the result is a flashing back of the flame; and where the mixture contains insufficient air, soot will be deposited which clogs the fixtures and reduces the efficiency of the service.

The 22 candle power standard, with about 650 B. T. U. in it, has this variable quality, which disturbs the air adjustment in ordinary household use, and a great deal of the gas is wasted, so the heat value of the air and gas mixture resulting from a 22 candle power gas is less than that given by a gas having less heat units, which is steady in its quality. This may explain why, in places where the B. T. U. standard has been established, it was not accompanied by an increased consumption, because with the same constant quality of gas the heat units which really got under the cooking utensil were working more steadily under ordinary domestic conditions.

The foregoing may be summarized by stating that the best gas service is obtained when an ample supply of constant quality gas is always available, and this condition is more easily secured under a reasonable heat value stand-

ard where the requirements approximate 500 to 540 British Thermal Units per cubic foot.

By the Commission.

Francis E. Roberts, Secretary.

[fol. 3259] PLAINTIFF'S EXHIBIT No. 213

State of New York Public Service Commission, Albany

William A. Prendergast, Chairman; William R. Pooley, Charles Van Voorhis, Oliver C. Semple, Charles G. Blakeslee, Commissioners

Case No. 108

September 1, 1922.

George B. Cortelyou, Esq., President Consolidated Gas Company of New York, 130 East 15th St., New York City:

Herewith is a certified copy of an order of this Commission, dated August 30, 1922, in the matter of the Standards of Purity, Lighting Power and Heating Power of Gas, and Standards of Measurement thereof, in the City of New York and Suburban Territory. (Order fixing standards of purity, power and pressure.)

Also herewith is a form of notification to this Commission, under section 23 of the Public Service Commission Law, of receipt by the company of said certified copy of said order.

Please sign and acknowledge this notification paper and mail forthwith to this Commission.

By the Commission.

Francis E. Roberts, Secretary.

MED

[fols. 3260 & 3261] PLAINTIFF'S EXHIBIT No. 214

STATE OF NEW YORK PUBLIC SERVICE COMMISSION

Case No. 108

In the Matter of Standards of Purity, Lighting Power and Heating Power of Gas and Standards of Measurement Thereof, in the City of New York and Suburban Territory

To the Public Service Commission of the State of New York:

The Consolidated Gas Company of New York hereby acknowledges the receipt by it of a copy of an Order certified by the Secretary of the Commission to have been adopted by the Commission, in the above-entitled proceedings, on August 30, 1922.

The Consolidated Gas Company of New York hereby notifies the Commission that the said Order of August 30, 1922, is accepted and will be obeyed by the said Company.

Consolidated Gas Company of New York, by G. B. Cortelyou, President.

[Corporate acknowledgment.]

[fol. 3262] PLAINTIFF'S EXHIBIT No. 215

State of New York Public Service Commission, Albany

William A. Prendergast, Chairman; William R. Pooley, Charles Van Voorhis, Oliver C. Semple, Charles G. Blakeslee, Commissioners

Cases Nos. 79, 79-G, 79-H, 79-I, 79-K, 79-N, 79-P, 79-Q

September 1, 1922.

George B. Cortelyou, Esq., President Consolidated Gas Company of New York, 130 East 15th St., New York City:

Herewith is a certified copy of an order of this Commission, dated August 30, 1922, in the matter of gas rates in

the city of New York and suburban territory, Cases Nos. 79, 79-G, 79-H, 79-I, 79-K, 79-N, 79-P, 79-Q.

Also enclosed herewith you will find typewritten copy of opinion of the Commission subject to correction in the proof, printed copy will be sent you in the future.

Also herewith is a form of notification to this Commission, under section 23 of the Public Service Commission Law, of receipt by the company of said certified copy of said order.

Please sign and acknowledge this notification paper and mail forthwith to this Commission.

By the Commission.

Francis E. Roberts, Secretary.

FM

[fol. 3263] PLAINTIFF'S EXHIBIT No. 216

Public Service Commission State of New York

Case No. 79

Matter of Gas Rates in the City of New York and Suburban Territory

Case No. 79-G

Matter of Rates for Gas of the Consolidated Gas Company of New York

Acceptance of Order

To the Public Service Commission of the State of New York:

The Consolidated Gas Company of New York hereby acknowledges receipt of a copy of an Order certified by the Secretary of the Commission to have been adopted by the Commission on August 30, 1922, in the above-entitled proceeding, prescribing the rates to be charged for gas by the said Company to all of its consumers other than the municipality of the City of New York, and the classifications of the gas service furnished to such consumers.

The Consolidated Gas Company of New York hereby notifies the Commission that the said Order of August 30, 1922,

and the terms and conditions thereof, are accepted by the Company and will be obeyed.

In accepting, and agreeing to obey, the said Order of August 30, 1922, conditioned for the period therein prescribed, the Consolidated Gas Company of New York does not waive its right, upon any hearings or proceedings hereafter had, to a return upon the full value of its property at such time, nor its right to reimbursement for losses sustained by it since January 1, 1917 by reason of inadequate rates; nor does the Company admit that the rates prescribed by the said Order are adequate or that they are [fols. 3264 & 3265] such as to afford to this Company just compensation for the gas service furnished by it, or a fair return upon its investment in its gas property as found by the Commission, much less upon the present value thereof. Increases in the costs of operations, particularly those due to the high prices necessarily paid for coal or coke, have aggravated the inadequacy of the rates now in force and leave the rates fixed by the said Order substantially less than adequate under present conditions. In deference, however, to the views of the Commission, reached after extended investigation, and in an expectation or hope that, as intimated by the Commission in its Opinion, some reductions in operating expenses during the period stipulated by the Commission for the continuance of the rates now prescribed, may render such rates more nearly adequate, the Consolidated Gas Company of New York has determined to, and does hereby, accept, the said Order of August 30, 1922, upon the terms and conditions therein set forth.

Dated, September 13, 1922.

Consolidated Gas Company of New York, by G. B. Cortelyou, President.

[Corporate acknowledgment.]

[fol. 3266] PLAINTIFF'S EXHIBIT No. 217

State of New York Public Service Commission, 91 State Street, Albany

Commissioners: William A. Prendergast, Chairman; William R. Pooley, Charles Van Voorhis, Oliver C. Semple, Charles G. Blakeslee. Secretary: Francis E. Roberts. Executive Officer: Harry M. Ingram. Counsel: Ledyard P. Hale.

Special Permission Order No. G-65

Upon application filed September 27, 1922, by Consolidated Gas Company of New York for itself and the Standard Gas Light Company of the City of New York; New Amsterdam Gas Company; The East River Gas Company of Long Island City; Astoria Light, Heat and Power Company; Central Union Gas Company; Northern Union Gas Company; Bronx Gas and Electric Company; and New York and Queens Gas Company, it appearing that to put into effect October 1, 1922, the rates for gas to be supplied to all of its Customers, other than the City of New York, prescribed by the Commission in its orders in Case No. 79, an order permitting the filing of the new schedules on short notice is necessary, it is

Ordered, under subdivision 12 of section 66 of Public Service Commission Law, that the above named companies are hereby authorized to publish, post, and file, under an effective date of October 1, 1922, and at least one day prior thereto, new schedules for gas service prepared in accordance with this commission's regulations establishing therein the rates, charges, rules, regulations and practices stated in exhibit or proposed schedule for gas service accompanying said application, such rates being the same as those prescribed by the commission to become effective October 1, 1922.

Dated Albany, N. Y., September 27, 1922.

By the Commission.

Francis E. Roberts, Secretary.

[fol. 3267] STATEMENT RE PLAINTIFF'S EXHIBIT NO. 218

Tariff schedule of the Consolidated Gas Company of New York identified as P. S. C. No. 1—Gas (superseding Con. G. Co. No. 1) issued filed and posted September 30, 1922, effective October 1, 1922, for gas service in the Boroughs of Manhattan and The Bronx, City of New York.

(NOTE.—The printing of the text of this exhibit is omitted.)

[fol. 3268] STATEMENT RE PLAINTIFF'S EXHIBIT NO. 219

Order made by Public Service Commission, June 4, 1923, in Case No. 1360 "In the Matter of rates to be charged for gas in the City of New York," directing compliance with the provisions of Chapter 899 of the Laws of 1923, in relation to charges for gas in cities of over one million inhabitants.

(NOTE.—A copy of this exhibit is set forth in the answer of the defendants, William A. Prendergast, et al., constituting the Public Service Commission, paragraph IV, for which see pleadings herein.)

[fol. 3269] PLAINTIFF'S EXHIBIT NO. 254

STATE OF NEW YORK PUBLIC SERVICE COMMISSION

At a Session of the Public Service Commission Held in the City of Albany on the 21st Day of September, 1922

Present: William A. Prendergast, Chairman; William R. Pooley, Charles Van Voorhis, Commissioners.

Case No. 881

In the Matter of the Standards of the Purity, Illuminating Power and Heating Power, and Standards for the Measurement Thereof, of Gas to be Manufactured, Distributed, or Sold by Persons, Corporations, or Municipalities for Lighting, Heating, or Power Purposes.

This Commission on the 30th day of August, 1922, by its order, and after public hearings and exhaustive investiga-

tion, having fixed and determined the standards of the purity, illuminating power and heating power, and standards for the masurement thereof, of gas manufactured, distributed or sold in the city of New York and suburban territory, and being of the opinion that similar standards should so far as practicable apply to other portions of the State, and at this time having determined that said standard should apply to manufactured gas sold by the corporation hereinafter named, it is

Ordered: I. That on and after October 15, 1922, Sea Cliff and Glen Cove Gas Company, shall in lieu of the existing standard or standards, furnish to its consumers a quality of manufactured gas which shall comply with the following requirements:

(a) Containing not more than 15 per cent of inert constituents.

(b) Containing not more than a trace of hydrogen sulphide.

(c) Containing not more than 30 grains of sulphur, not more than 5 grains of ammonia in each 100 cubic feet of gas, corrected to a temperature of 60 degrees of Fahrenheit and atmospheric pressure corresponding to a thirty inch (30″) column of mercury.

(d) Under conditions of complete combustion, corrected to a temperature of 60 degrees Fahrenheit and atmospheric pressure corresponding to a thirty inch (30″) column of mercury, the monthly average heating value of the gas furnished as determined by at least three tests per day made at intervals of not less than three hours shall be not less than 537 British thermal units per cubic foot, and the average of said three daily tests per day for any three consecutive days shall not be less than 525 British thermal units per cubic foot. The heating value as determined by said tests shall not on any three consecutive days in any calendar month exceed the aforesaid monthly average by five per centum.

II. That said corporation shall, subject to the approval of the Commission, within sixty (60) days from the effective date of this order, provide and maintain a testing station or stations at a point or points to be approved by the

Commission. Such testing stations shall be provided with suitable apparatus, equipment, re-agents and facilities for testing gas as indicated below, together with all necessary accessories and appurtenances:

[fol. 3270] (a) An approved type of gas calorimeter set.

(b) An approved type of apparatus for the determination of and test for hydrogen sulphide.

(c) An approved type of recording pressure gauge.

Station and station equipment shall be kept in good condition, ready for use at all reasonable hours, and access shall be allowed to representatives of this Commission for the purpose of making gas tests at any time.

III. That said corporation shall on each day at intervals of not less than three hours, and at the approved testing station or stations, make not less than three tests of the heating value of the gas and its hydrogen sulphide content.

IV. The standard forms approved by this Commission shall be used for recording all tests made by said corporation which records shall be retained in the stations where made for a period of two (2) years from the recording date.

V. That a gas shall be considered to contain not more than a trace of hydrogen sulphide if a strip of white paper moistened with a solution containing 5 per cent by weight of acetate of lead, on being exposed to a current of the gas flowing at a rate of about 5 cubic feet per hour, does not become discolored after an exposure of 30 seconds.

VI. That the standards herein provided for shall supersede existing standards for gas heretofore fixed by order of Public Service Commission, Second District, dated October 11, 1916.

VII. That the term daily average as used in this order is defined to be the sum of all tests made during each day, which tests shall be not less than three in number and made at intervals of not less than three hours, divided by the number of tests made.

VIII. That the term monthly average as used in this order is defined to be the sum of all daily averages for each calendar month divided by the number of days in that month.

IX. That said corporation shall file with this Commission at its office in the City of Albany not less than five (5) days after the expiration of each calendar month a report showing the daily average for each day and the monthly average; that said report shall be furnished on a form approved by this Commission, and shall be signed by a responsible official of the corporation.

X. That on or before October 10, 1922, said corporation shall file with this Commission tariff schedules which shall reduce the present rates for manufactured gas furnished by said corporation as shown by their respective tariff schedules now on file and in effect at least five cents (5¢) per thousand cubic feet, such revised schedule to become effective October 15, 1922.

XI. That this order shall take effect on October 15, 1922, and contine in effect until changed, modified or abrogated by this Commission, and that within ten (10) — from the service of a copy hereof, said corporation shall notify this Commission whether this order is accepted and will be obeyed.

By the Commission.

(Sgd.) Francis E. Roberts, Secretary. (Seal.)

[fol. 3271] PLAINTIFF'S EXHIBIT No. 255

This exhibit consists of a petition by the Consolidated Gas Company of New York to the Public Service Commission of the State of New York, to which there are annexed certain schedules designated respectively as Schedules A, B and C. The printing of these schedules is omitted. The petition is as follows:

[fol. 3272] PUBLIC SERVICE COMMISSION OF THE STATE OF NEW YORK

In the Matter of the Application of THE CONSOLIDATED GAS COMPANY OF NEW YORK, under Section 69 of the Public Service Commission Law, for an Order Authorizing the Issuance and Sale of 600,000 shares of Common Stock Without Nominal or par Value for the Purposes Specified in the said Section.

To the Public Service Commission of the State of New York:

The petition of the Consolidated Gas Company of New York respectfully shows:

I. The petitioner is a corporation organized and existing under the laws of the State of New York, having its principal office and place of business at No. 130 East 15th Street, in the Borough of Manhattan, City of New York, having been formed by the consolidation of The New York Gas Light Company, The Manhattan Gas Light Company, the Metropolitan Gas Light Company, the Municipal Gas Light Company, The Knickerbocker Gas Light Company and The Harlem Gas Light Company, on the 10th day of November, 1884, and since that date the petitioner has been engaged in the manufacture, sale and distribution of gas in the Boroughs of Manhattan and The Bronx, in the City of New York, by virtue of franchises granted to its constituent companies by the municipal authorities of the City of New York, certified copies of which, together with maps of the district supplied, were heretofore filed in the office of the Commission on or about the 23rd day of September, 1907, and May 2, 1916. A certified copy of the Consolidation Agreement was also filed in the office of the Commission on or about September 23, 1907.

II. On or about March 9, 1900, the capital stock of the petitioner was increased to $54,595,000; and thereafter and [fol. 3273] on or about July 16, 1900, the capital stock was further increased to $80,000,000, and on or about June 2, 1904, to $100,000,000. On or about May 25, 1914, the petitioner's authorized capital stock was further increased to

$125,000,000, divided into 1,250,000 shares, of the par value of $100 each.

III. The petitioner further shows that on or about December 5, 1922, its capital stock was increased from $125,000,000 to $140,000,000, consisting of 300,000 shares of Six per cent. Cumulative Participating Preferred Stock of the par value of $50 each, and 1,250,000 shares of common stock of the par value of $100 each; and on December 13, 1922, the petitioner filed its certifiate, amending its certificate of incorporation (Consolidation Agreement), pursuant to Section 24 of the Stock Corporations Law, in the proper offices in the State of New York, wherein and whereby the petitioner was authorized to issue 3,000,000 shares of common stock, without nominal or par value, 2,500,000 shares to be issued in place of the outstanding shares of common capital stock of the petitioner, at the rate of two (2) shares of common stock, without nominal or par value, for each share of stock of the nominal or par value of $100; and the balance of 500,000 shares of its common stock, without nominal or par value to be sold, pursuant to the authority contained in the order of the Commission, dated December 7, 1922, in Case No. 991.

IV. During the period beginning January 31, 1920 and ended October 31, 1923, the petitioner acquired the following property:

a. The works distributing system and other property of The New York Mutual Gas Light Company, purchased with the approval and consent of the Commission (Case 680) for the sum, exclusive of working capital of $10,010,630.72. Deducting from this amount $5,703,290.65, the petitioner's investment in the capital stock of the said Mutual Company, leaves a net increase in the petitioner's corporate assets, on account of this purchase, which the petitioner now desires to capitalize, of	$4,307,340 07
b. Several tracks of land located at Hunt's Point, Borough of The Bronx, comprising about 184 acres, on which the petitioner intends to erect a gas plant to meet	

the future demands for gas, the details as to the acquisition of which property and the need therefor being already known to the Commission	2,265,103 00
[fol. 3274] c. Seven thousand and ninety (7,090) shares of the preferred stock, without nominal or par value, and Four hundred and fifty-six thousand seven hundred (456,700) shares of the common stock, without nominal or par value, of the Consolidated Telegraph and Electrical Subway Company	23,189,500 00
d. Four thousand seven hundred and seventy-five (4,775) shares of the capital stock of the Bronx Gas and Electric Company, acquired with the approval and consent of the Commission (Case No. 2752) for the sum of $358,125.00, of which the petitioner desires to capitalize, at this time	238,056 93
Total	$30,000,000 00

V. There was actually expended in acquiring the property specified in paragraph IV hereof moneys obtained from the following sources:

a. From sums borrowed since June 30, 1922, which are still owing and payable	$11,400,000 00
b. From income and from other moneys in the treasury not secured or obtained from the issue of stocks, bonds, notes or other evidences of indebtedness, out of a total of $21,861,573 81	$18,600,000 00
Total	$30,000,000 00

VI. The petitioner accordingly makes this application for an order authorizing the issuance of 600,000 shares of common stock, to be sold so as to net the petitioner not less than $50 a share, or $30,000,000.

[fol. 3275] VII. The moneys derived from the sale of the said stock are to be applied as follows:

a. For the discharge of the petitioner's obligations for moneys borrowed as stated in paragraph V hereof	$11,400,000
b. For the reimbursement in part of moneys actually expended from income and from other moneys in the treasury not secured or obtained from the issue of stocks, bonds, notes or other evidences of indebtedness	18,600,000
Total	$30,000,000

VIII. A statement of the petitioner's financial condition as of October 31, 1923, is hereto annexed, marked "Schedule A", and made a part hereof.

IX. A description of the plant or system and equipment of the petitioner, and a statement of the cost of existing property as of October 31, 1923, is also hereto annexed, marked "Schedule B", and made a part hereof. Also annexed hereto, marked "Schedule C", and made a part hereof, is a comparative balance sheet of the petitioner, showing its assets and liabilities as of the beginning and end of the period stated in paragraph IV hereof, and the changes occurring during such period.

X. A certificate showing the consent of stockholders to the issuance of the additional shares of common stock will be hereafter filed herein.

XI. No contract for the acquisition of property, the construction, completion, extension or improvement of its facilities or for the disposition of the said stock which it is proposed to issue, or the avails thereof, has been made.

XII. None of the outstanding stock or obligations of the petitioner have been issued or used in capitalizing any franchise or any right to operate, own or enjoy any franchise, or any contract for consolidation or lease, except that at the time of consolidation, on the tenth day of November, 1884, as in paragraph I hereof is set forth, the value of the franchises and rights of the constituent companies was

estimated at $7,781,000, and capital stock of the petitioner of the par value of $7,781,000 was duly issued therefor.

[fol. 3276] Wherefore the petitioner prays for an order authorizing the issuance and sale of 600,000 shares of its common stock, as hereinbefore more fully set forth, all in accordance with the provisions of the Public Service Commission Law.

New York, November 16, 1923.

Consolidated Gas Company of New York, by
(Signed) Geo. B. Cortelyou, President.

Attest: (Signed) H. M. Brundage, Secretary. (Seal.)

[Verification.]

[fol. 3277] PLAINTIFF'S EXHIBIT No. 256

From: W. J. Fitzpatrick, Chief, Accounting Division.
To: The Commission.
Subject: Petition of the Consolidated Gas Company of New York, in Case No. 1682, to issue 600,000 shares of its common capital stock without nominal or par value and to sell same at not less than $50.00 per share to realize net proceeds of at least $30,000,000.

The Consolidated Gas Company of New York filed a petition on November 17, 1923, in Case No. 1682, asking authority to issue 600,000 shares of its common capital stock without nominal or par value and to sell same at not less than $50.00 per share to realize net proceeds of at least $30,000,000 and to use said proceeds for the following purposes:

(a) The works, distributing system and other property of The New York Mutual Gas Light Company purchased with the approval and consent of the Commission (Case 680) for the sum, exclusive of working capital, of $10,010,630.72. Deducting

from this amount $5,703,290.65, the petitioner's investment in the capital stock of the said Mutual Company, leaves a net increase in the petitioner's corporate assets on account of this purchase, which the petitioner now desires to capitalize, of	$4,307,340 07
(b) Several tracks of land located at Hunt's Point, Borough of The Bronx, comprising about 184 acres, on which the petitioner intends to erect a gas plant to meet the future demands for gas, the details as to the acquisition of which property and the need therefor being already known to the Commission	3,265,103 00
(c) Seven thousand ninety (7,090) shares of the preferred stock, without nominal or par value, and Four Hundred and Fifty Six Thousand Seven Hundred (456,700) shares of the common stock, without nominal or par value, of the Consolidated Telegraph and Electrical Subway Company	23,189,500 00
(d) Four Thousand Seven Hundred and Seventy-five (4,775) shares of the capital stock of the Bronx Gas and Electric Company, acquired with the approval and consent of the Commission (Case No. 2752) for the sum of $358,125.00, of which the petitioner desires to capitalize at this time	238,056 93
	$30,000,000 00

[fol. 3278] The Commission's Accounting Division and Engineering Division have examined into the petition and supporting papers in this case, and the Engineering Division has made a preliminary report in connection with its

inspection of the records of the Consolidated Telegraph and Electrical Subway Company, the majority of whose stock is now owned and held by the Consolidated Gas Company of New York.

In connection with that part of the petition pertaining to the capitalization of the property of the New York Mutual Gas Light Company, the Accounting Division reports as follows:

(a) The Commission, by an order entered on August 17, 1922, in Case No. 1680, authorized the New York Mutual Gas Light Company to transfer its works and systems to the Consolidated Gas Company of New York, as of February 28, 1922. The basis of the transfer was value of the property as determined by the Commission's Engineering Division, and the Consolidated Gas Company assumed certain outstanding liabilities of said Mutual Gas Light Company, making the total cost of the works and systems and other property of the Mutual Gas Light Company of $10,010,630.72.

(b) The Accounting Division has examined the vouchers covering the monies paid for the several tracks of land located at Hunts Point, Borough of The Bronx, in which the petitioner intends to erect a gas plant, and have found that the vouchers cover actual expenditures paid for said property.

(c) That part of the application pertaining to the shares of preferred and common stock without nominal or par [fol. 3279] value of the Consolidated Telegraph and Electrical Subway Company have been examined into by both the Accounting and Engineering Divisions, and the Engineering Division is submitting in connection therewith a separate memorandum on this matter.

The Consolidated Telegraph and Electrical Subway Company owns the subways in the Borough of Manhattan and Bronx, New York City, in which the conducts are placed for electrical transmission and distributing wires. Yearly leases at certain specific rates are given to the various electrical companies of Manhattan and Bronx.

In connection with the proceeding in the name of the City of New York v. Consolidated Telegraph and Electrical Sub-

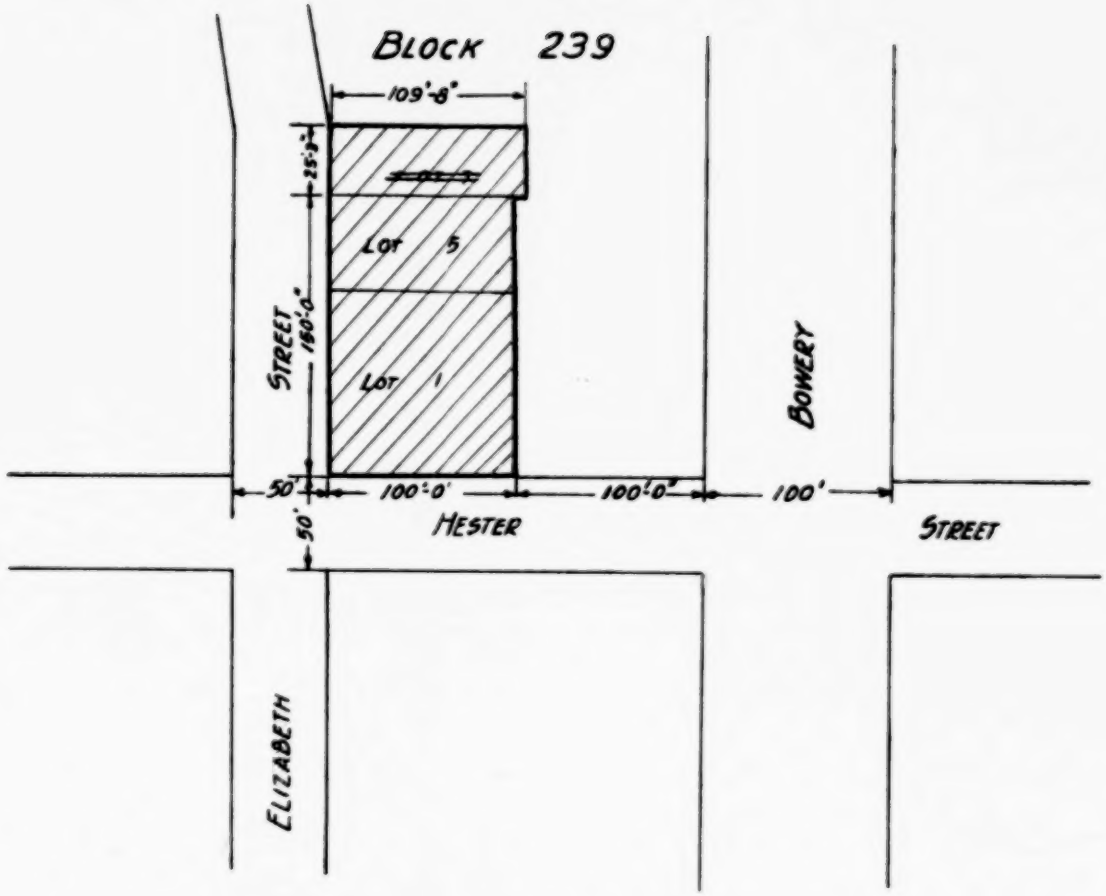
way Company, a decision was handed down by the Appellate Division, Supreme Court of New York, and affirmed by the Court of Appeals, in which the value of the fixed capital of the Consolidated Telegraph and Electrical Subway Company at December 31, 1906 was determined to be $9,007,-619.34. The company reports as of October 31, 1923 an amount of $37,291,582.75, which amount includes an amount of $3,380,899.85, disallowed by the Referees and taken into consideration by the Court's decision hereinbefore referred to. The reason that the Company still carries this amount on its books at the present time is that there is some dispute with the City of New York as to some interest charges, although the Company states that it has no intention of claiming that any consideration should be given to this item as a part of its plant and property.

The Accounting Division, in computing the net worth of the stock, has eliminated this amount of $3,380,899.85 from its computations.

An analysis of the balance sheet of the Company shows [fol. 3280] that the equity in the value of its outstanding common and preferred stock of the Consolidated Telegraph and Electrical Subway Company is approximately $1,620,-394.12 which leaves an efficient margin to apply any adjustments which may be necessary as a result of the examination which is to be further made by the Commission's Engineering Division in the accounts of this Company. The Accounting Division, therefore, believes that the value of the stock, both common and preferred, without nominal or par value, which the Consolidated Gas Company desires to capitalize, is in excess of the amount which it desires to capitalize said stock.

There is attached hereto for the information of the Commission a balance sheet of the Consolidated Telegraph and Electrical Subway Company, and Profit and Loss Account as of October 31, 1923, together with a summary of the method used in arriving at the equity in the stock of this Company.

In reference to that part of the application pertaining to the capital stock of the Bronx Gas and Electric Company, an order was issued authorizing the Consolidated Gas Company to acquire 4,475 shares of the capital stock of said Company for the sum of $358,125, of which amount the Con-

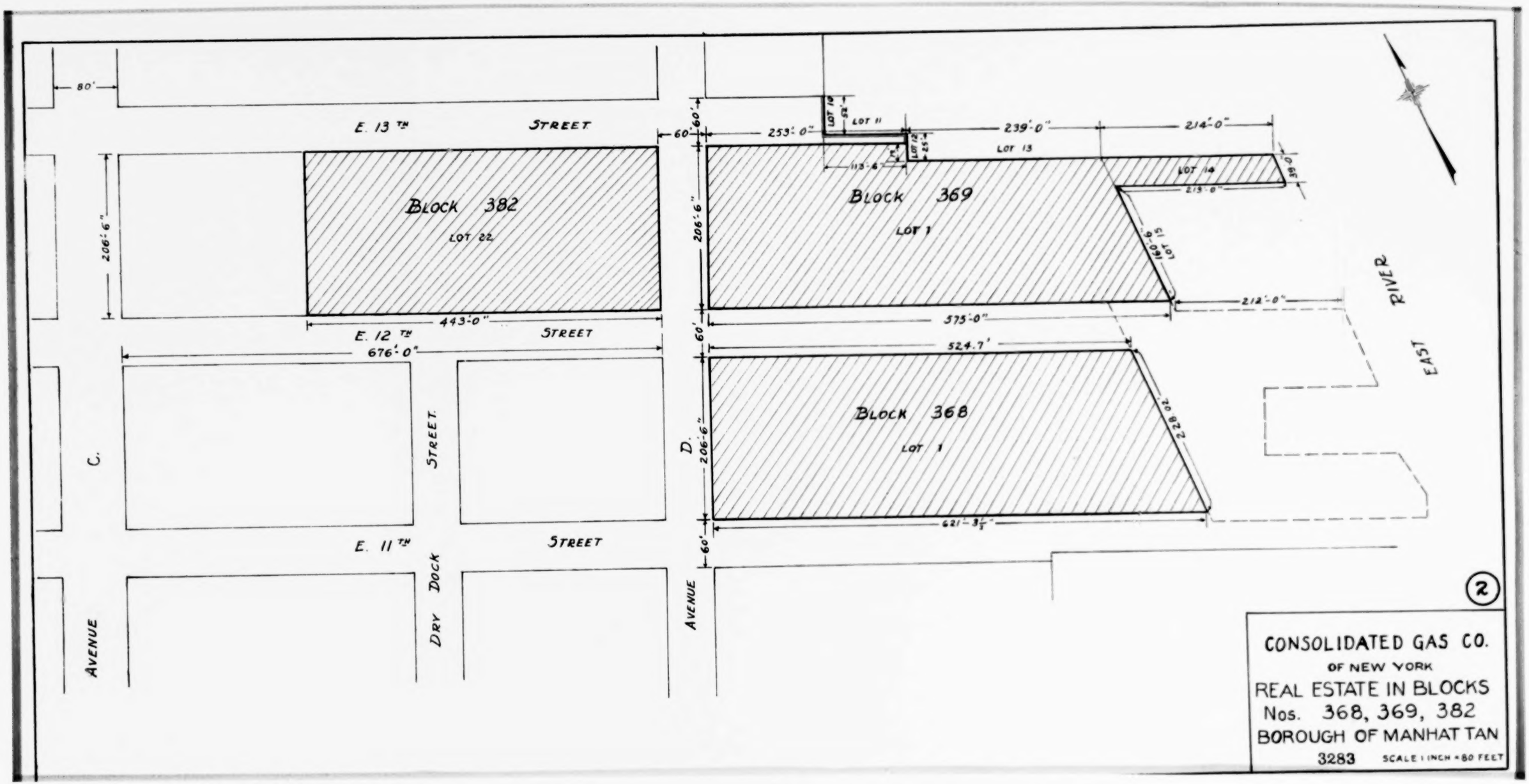


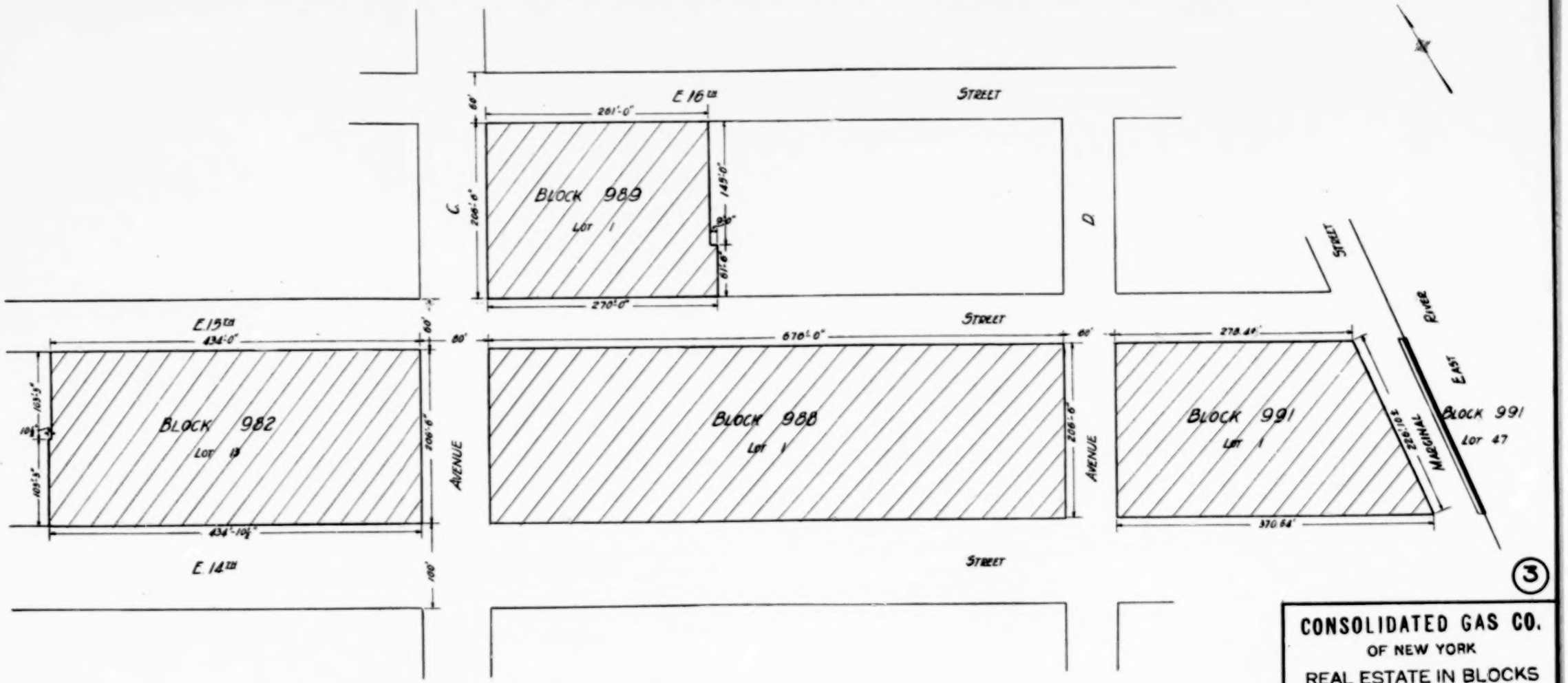
PLAINTIFF'S EXHIBIT #258
MARCH 4, 1924

NOTE:-
FOR PLAINTIFF'S EXHIBIT #259
SEE SHEET #21

(1)

CONSOLIDATED GAS CO.
OF NEW YORK
REAL ESTATE IN BLOCKS
Nos. 239
BOROUGH OF MANHATTAN
3282 SCALE 1 INCH-80 FEET

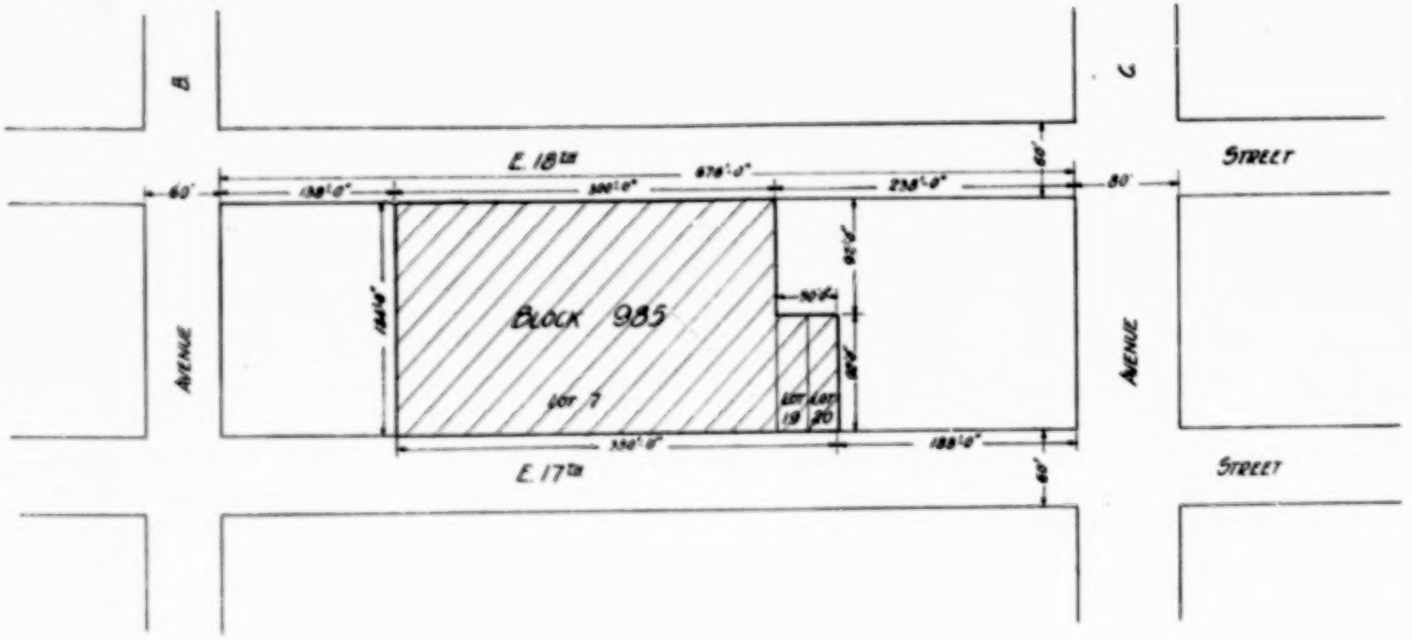

80'
E. 13 TH STREET
60'
60'
253'-0"
LOT 10
22'
LOT 11
239'-0"
214'-0"
LOT 12
25'
LOT 13
113'-6"
LOT 14
39'-0"
213'-0"
206'-6"
BLOCK 382
LOT 22
BLOCK 369
LOT 1
160'-9"
212'-0"
443'-0"
E. 12 TH STREET
575'-0"
60'
524.7'
676'-0"
206'-6"
BLOCK 368
LOT 1
621'-3½"
E. 11 TH STREET
60'
C. AVENUE
STREET
DRY DOCK
D. AVENUE
EAST RIVER
2
CONSOLIDATED GAS CO.
OF NEW YORK
REAL ESTATE IN BLOCKS
Nos. 368, 369, 382
BOROUGH OF MANHATTAN
3283
SCALE 1 INCH = 80 FEET



CONSOLIDATED GAS CO.
OF NEW YORK
REAL ESTATE IN BLOCKS
Nos. 982, 988, 989, 991
BOROUGH OF MANHATTAN
3284 SCALE 1 INCH-80 FEET

4

CONSOLIDATED GAS CO
OF NEW YORK
REAL ESTATE IN BLOCK
No. 870
BOROUGH OF MANHATTAN
3285 SCALE 1 INCH = 80 FEET



(5)

CONSOLIDATED GAS CO.
OF NEW YORK
REAL ESTATE IN BLOCKS
Nos. 985
BOROUGH OF MANHATTAN
3286
SCALE 1 INCH-80 FEET

E. 22ND

100'

615'-0"

80'

197'-6"

AVENUE

BLOCK 953

LOT 1

A.

60'

STREET

504.7'

197'-6"

BLOCK 979

LOTS 1 + 27

257'10"

STREET

760.29'

E. 21ST

60'

STREET

666'-0"

60'

184'-0"

LOT 35

65'-0"

70'-0"

LOTS 33-34

39'-0"

LOT 30

60'-0"

LOT 29

20'

BLOCK 952

LOT 7

517'-0"

92'-0"

LOT 5

70'-0"

LOTS 1-2-3-4

92'-0"

BLOCK 978

LOT 6

184'-0"

B.

184'-0"

84.94'

MARGINAL

60.07'

BLOCK 987

LOT 37

(ALSO FORMERLY INCLUDED LOTS 41-42-43-51)

238.78'

E. 20TH

STREET

176'0"

94'6"

60'

92'-0"

LOT 35

BLOCK 951

184'-0"

FIRST

AVENUE

AVENUE

E. 19TH

STREET

6

CONSOLIDATED GAS CO

OF NEW YORK

REAL ESTATE IN BLOCKS

Nos. 951, 952, 953, 978, 979, 987

BOROUGH OF MANHATTAN

3287

SCALE 1 INCH = 80 FEET

W. 43rd STREET

BLOCK 1090

LOT 23

100'-3"

130'-0"

100'-0"

200'-10" AVENUE

60'

100'

230'-0"

BULKHEAD LINE APPROVED BY SECRETARY OF WAR APRIL 29TH 1890

W. 42nd STREET

100'-6"

271'-2"

BLOCK 1107

LOT 7

198'-2"

355'-4"

100'-8"

255'-0"

BLOCK 1089

LOT 1

197'-6"

112'

W. 41st

1050'-0"

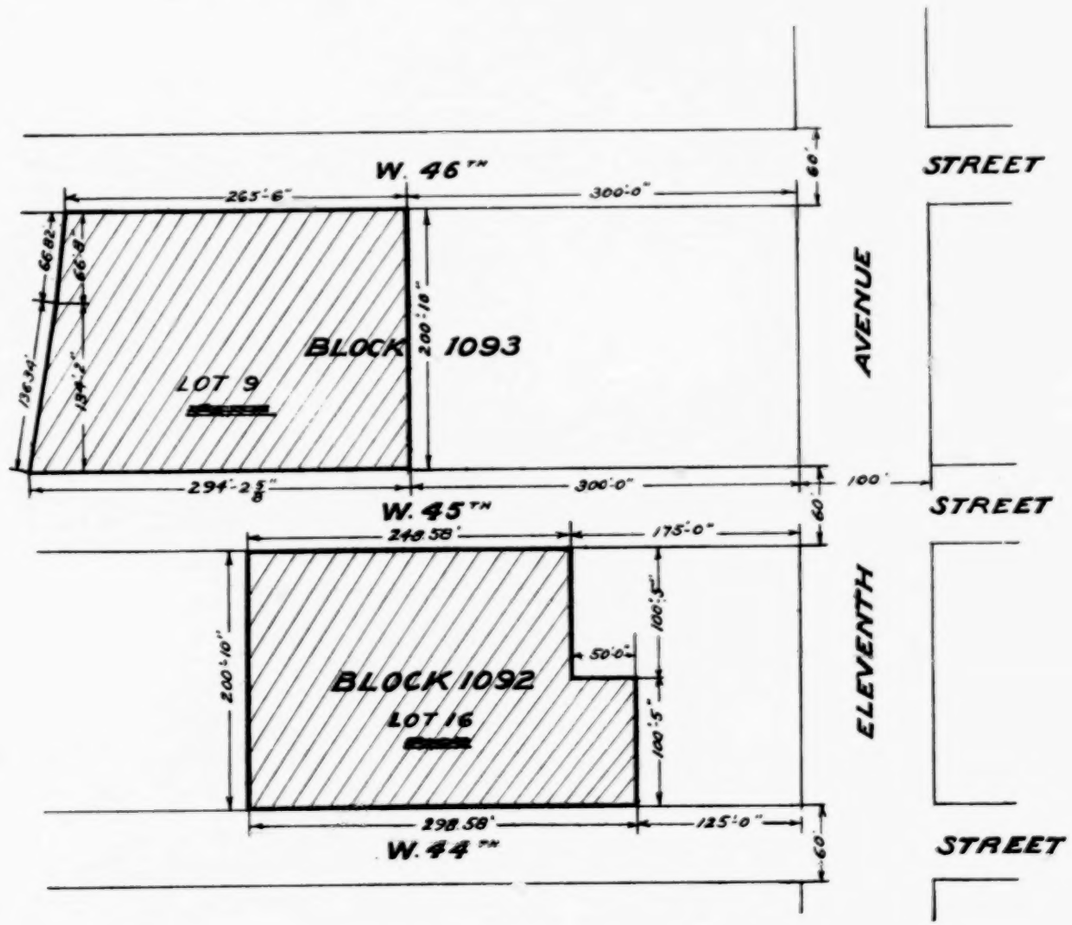
STREET

60'

(7)

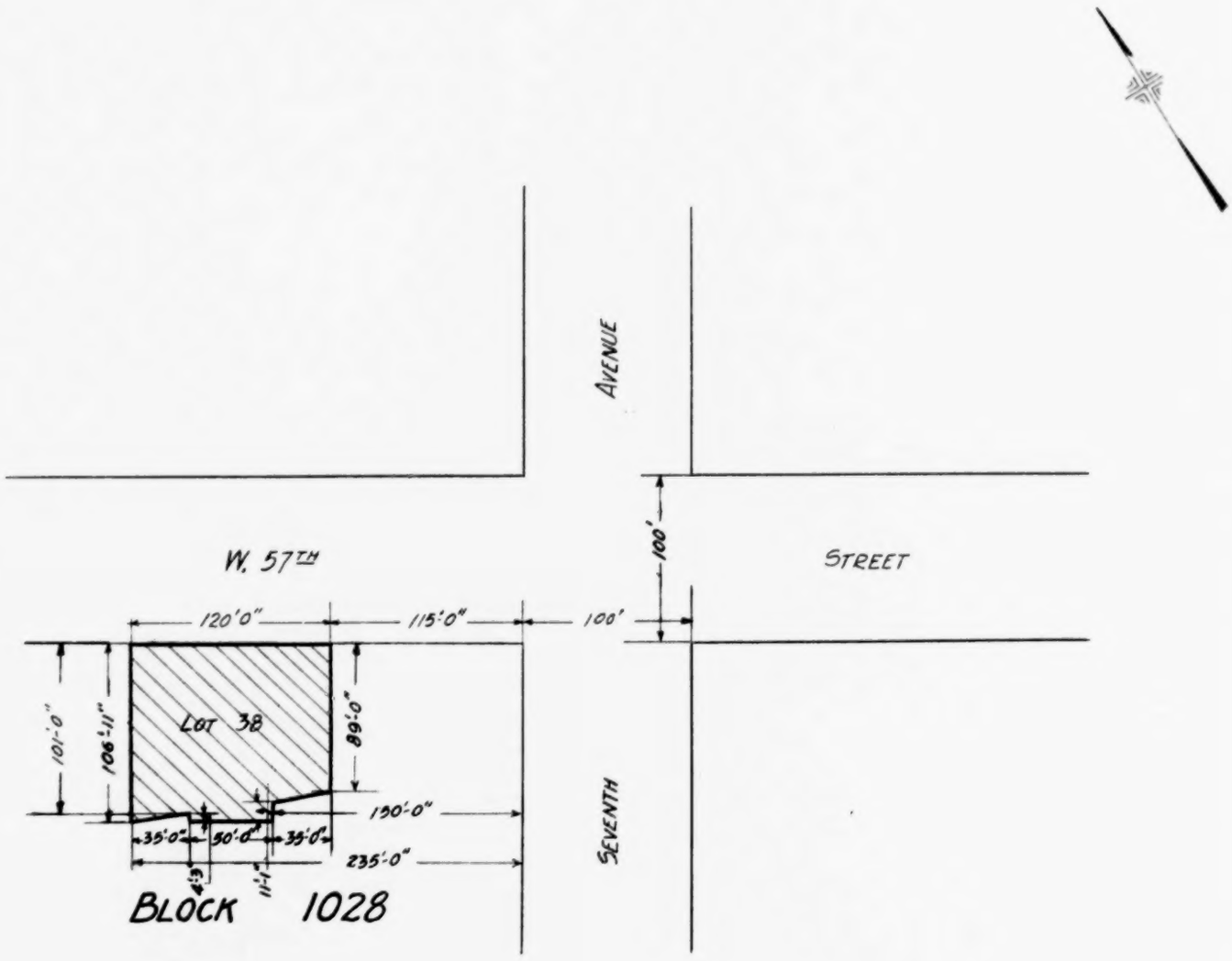
CONSOLIDATED GAS CO.
OF NEW YORK
REAL ESTATE IN BLOCKS
Nos. 1089, 1090, 1107
BOROUGH OF MANHATTAN
3288

SCALE 1 INCH=80 FEET



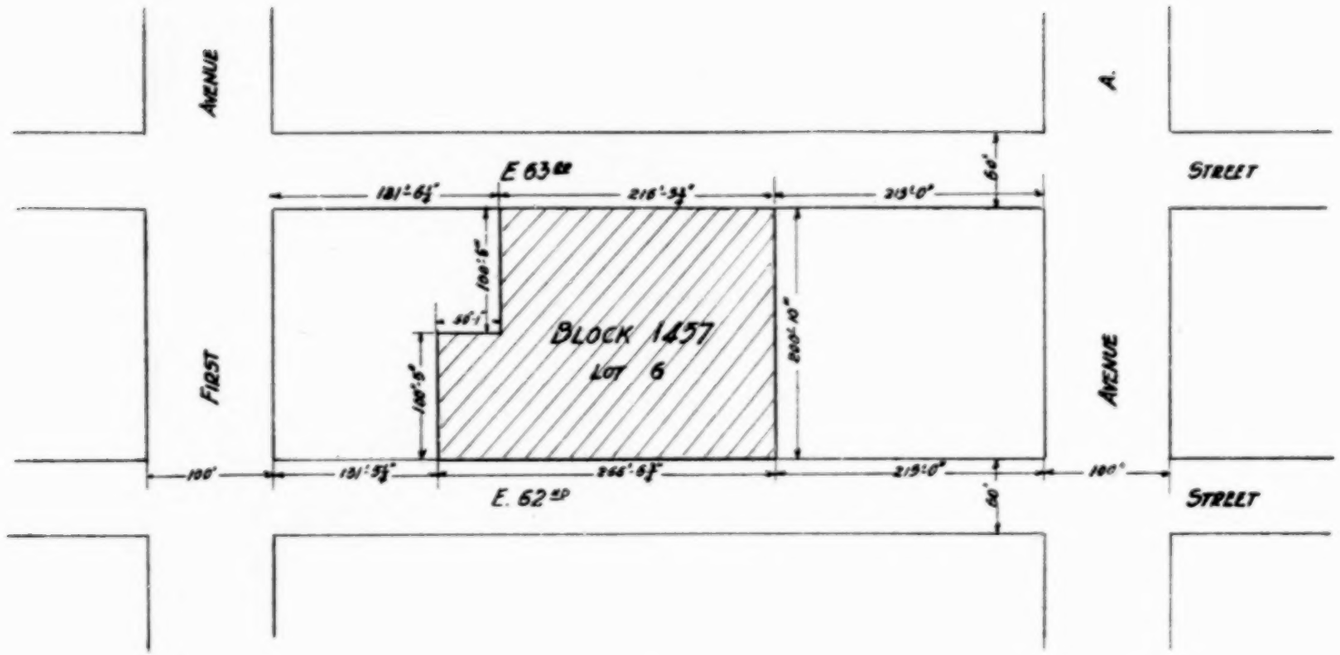
8

CONSOLIDATED GAS CO.
OF NEW YORK
REAL ESTATE IN BLOCKS
Nos 1092, 1093
BOROUGH OF MANHATTAN
3289
SCALE 1 INCH = 80 FEET



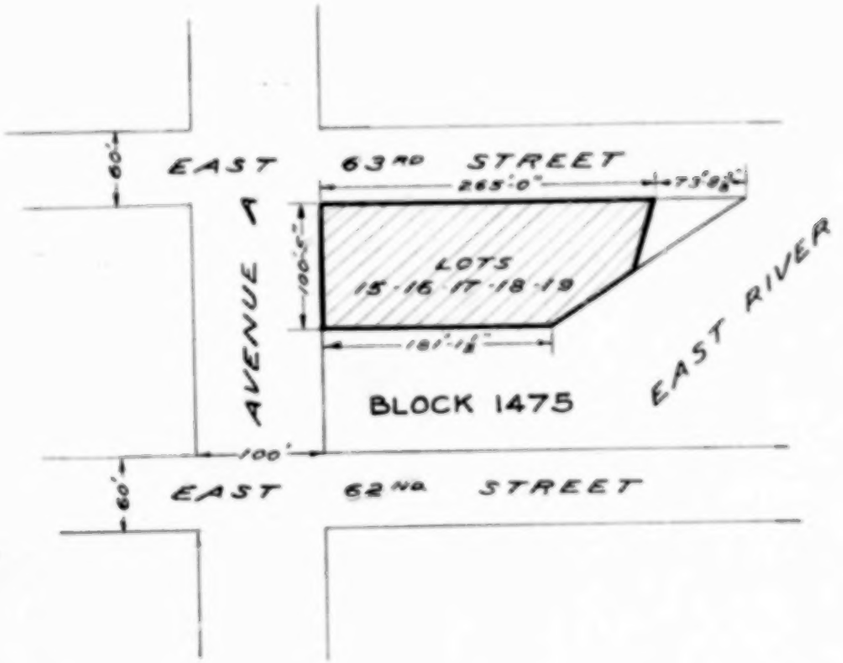
9

CONSOLIDATED GAS CO.
OF NEW YORK
REAL ESTATE IN BLOCKS
Nos. 1028
BOROUGH OF MANHATTAN



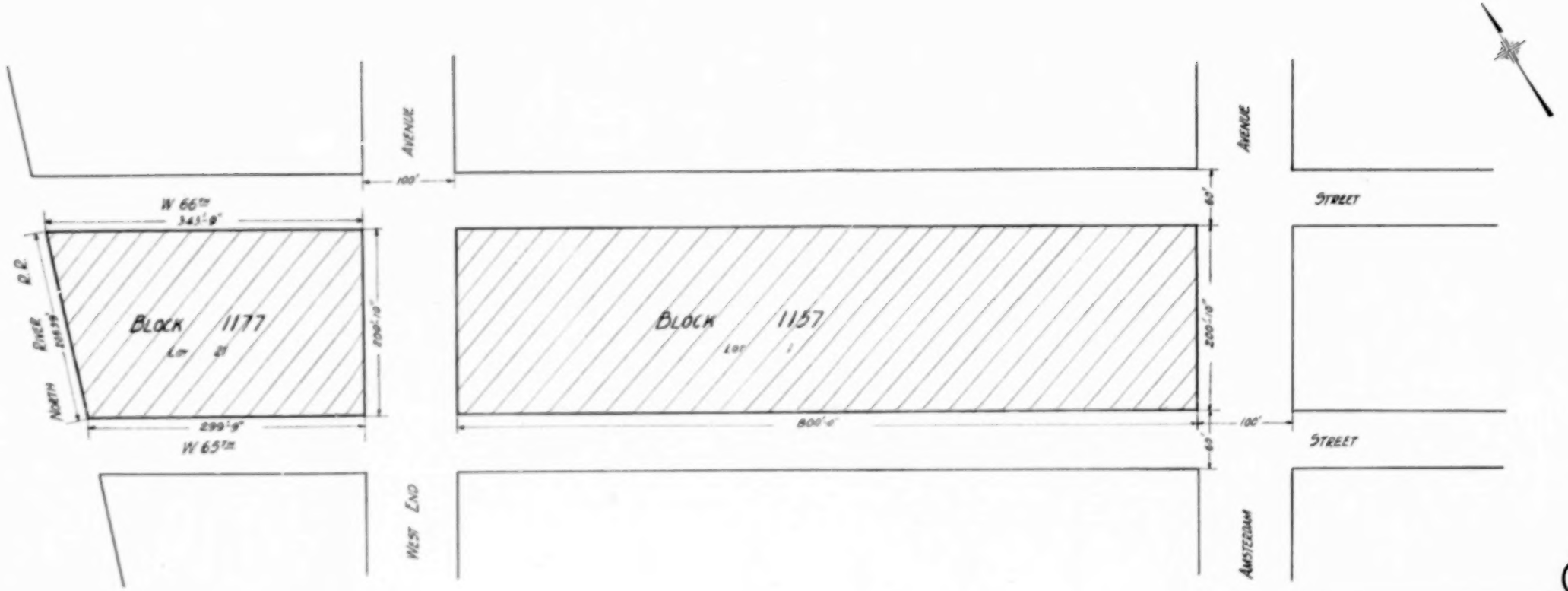
(10)

CONSOLIDATED GAS CO.
OF NEW YORK
REAL ESTATE IN BLOCKS
Nos. 1457
BOROUGH OF MANHATTAN
3291 SCALE 1 INCH 50 FEET



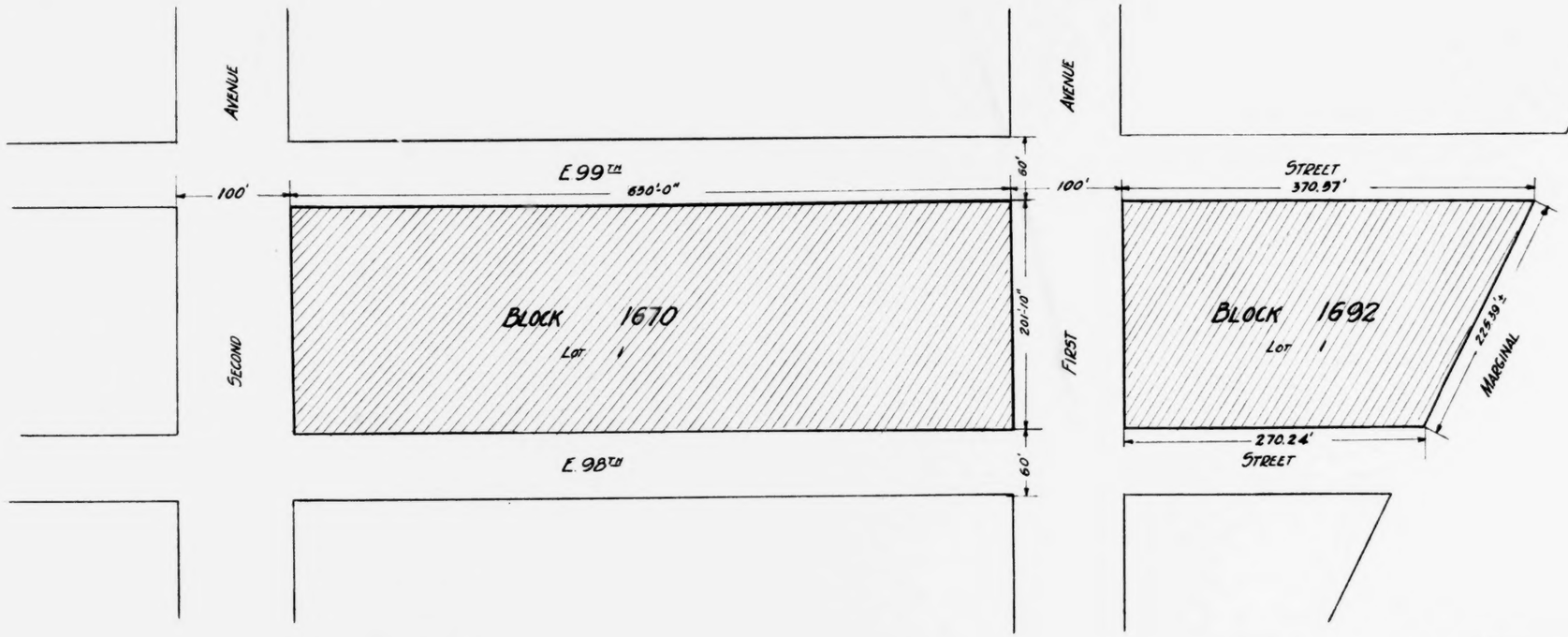
(11)

CONSOLIDATED GAS CO.
OF NEW YORK
REAL ESTATE IN BLOCK
NO. 1475
BOROUGH OF MANHATTAN
3292 SCALE 1 INCH = 80 FEET



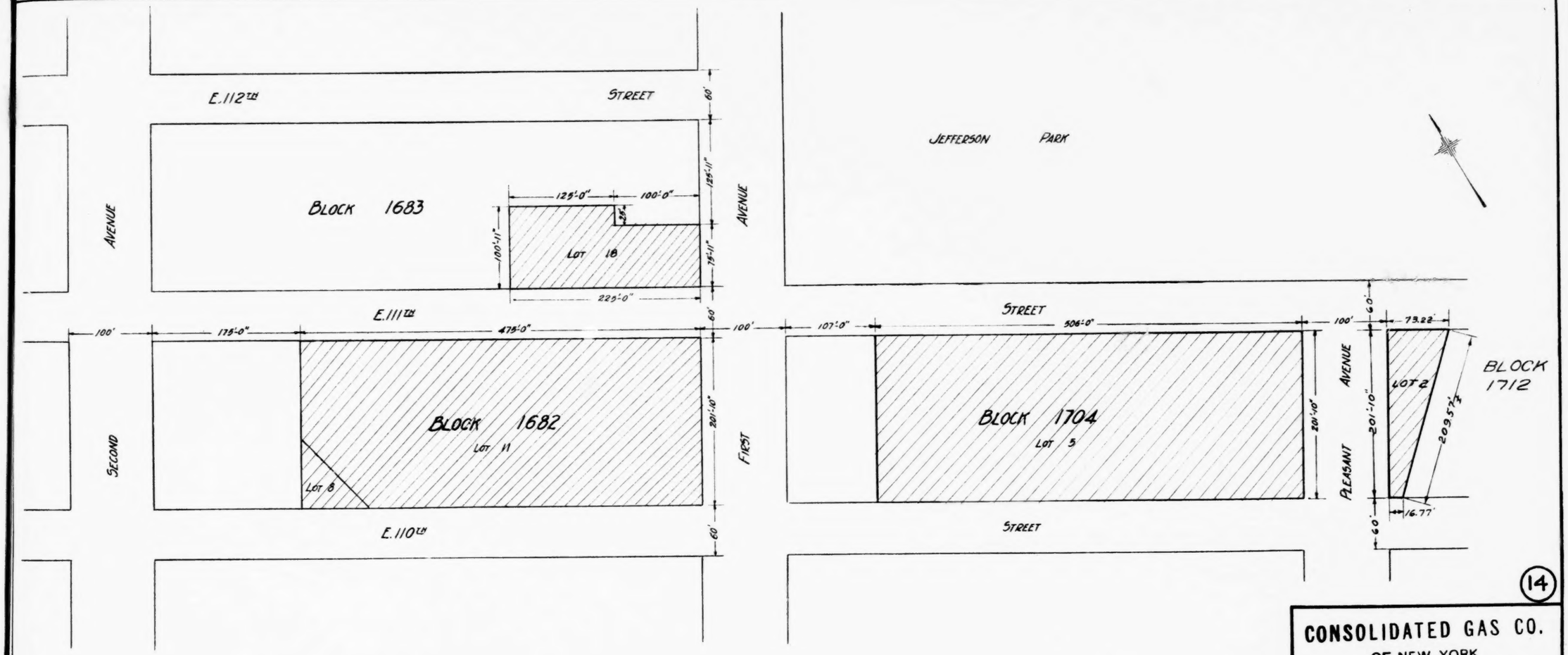
(12)

CONSOLIDATED GAS CO
OF NEW YORK
REAL ESTATE IN BLOCKS
Nos. 1157,1177
BOROUGH OF MANHATTAN
3293
SCALE 1 INCH=80 FEET

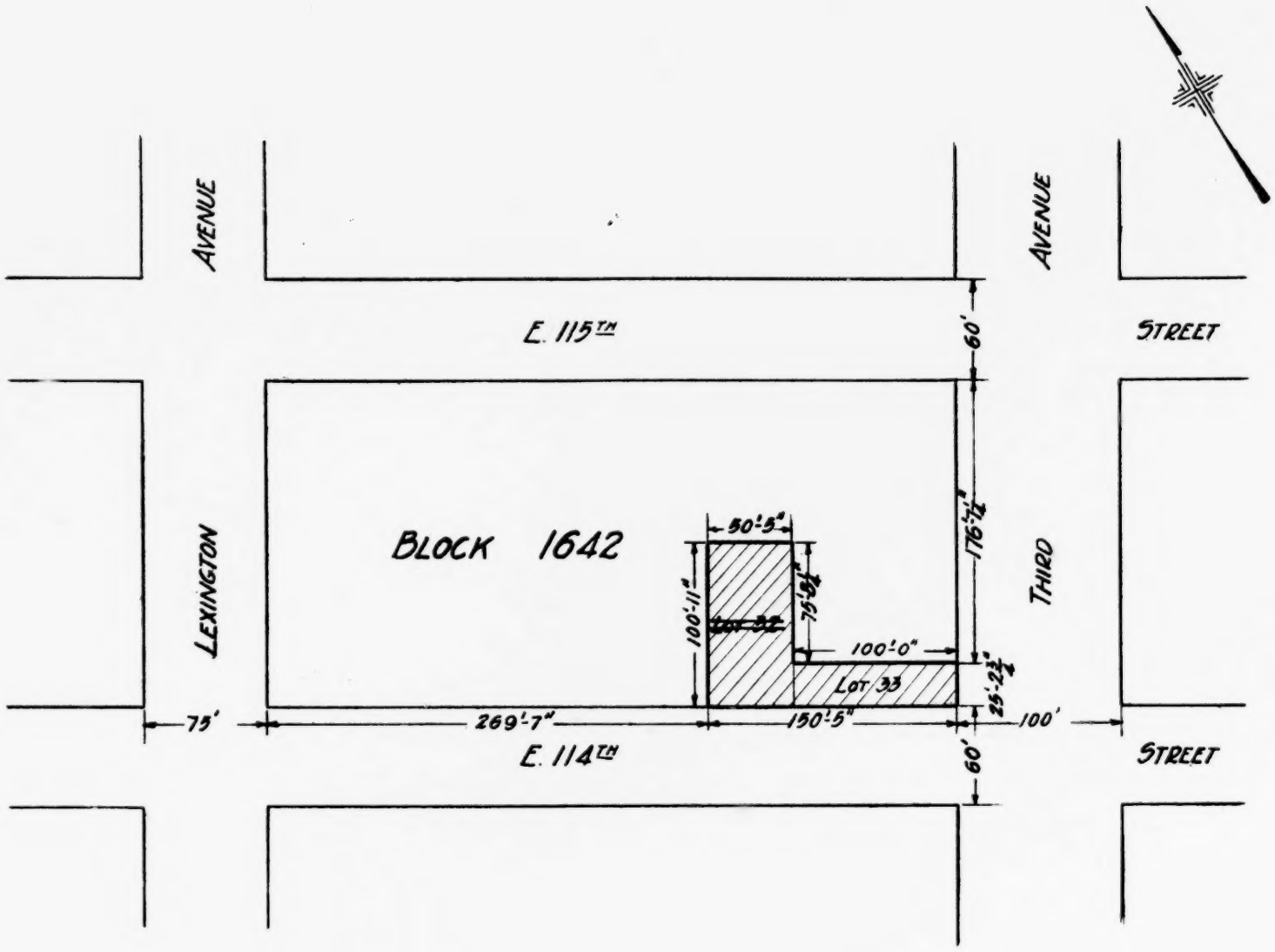


13

CONSOLIDATED GAS CO.
OF NEW YORK
REAL ESTATE IN BLOCKS
Nos. 1670,1692
BOROUGH OF MANHATTAN
3294
SCALE 1 INCH-80 FEET

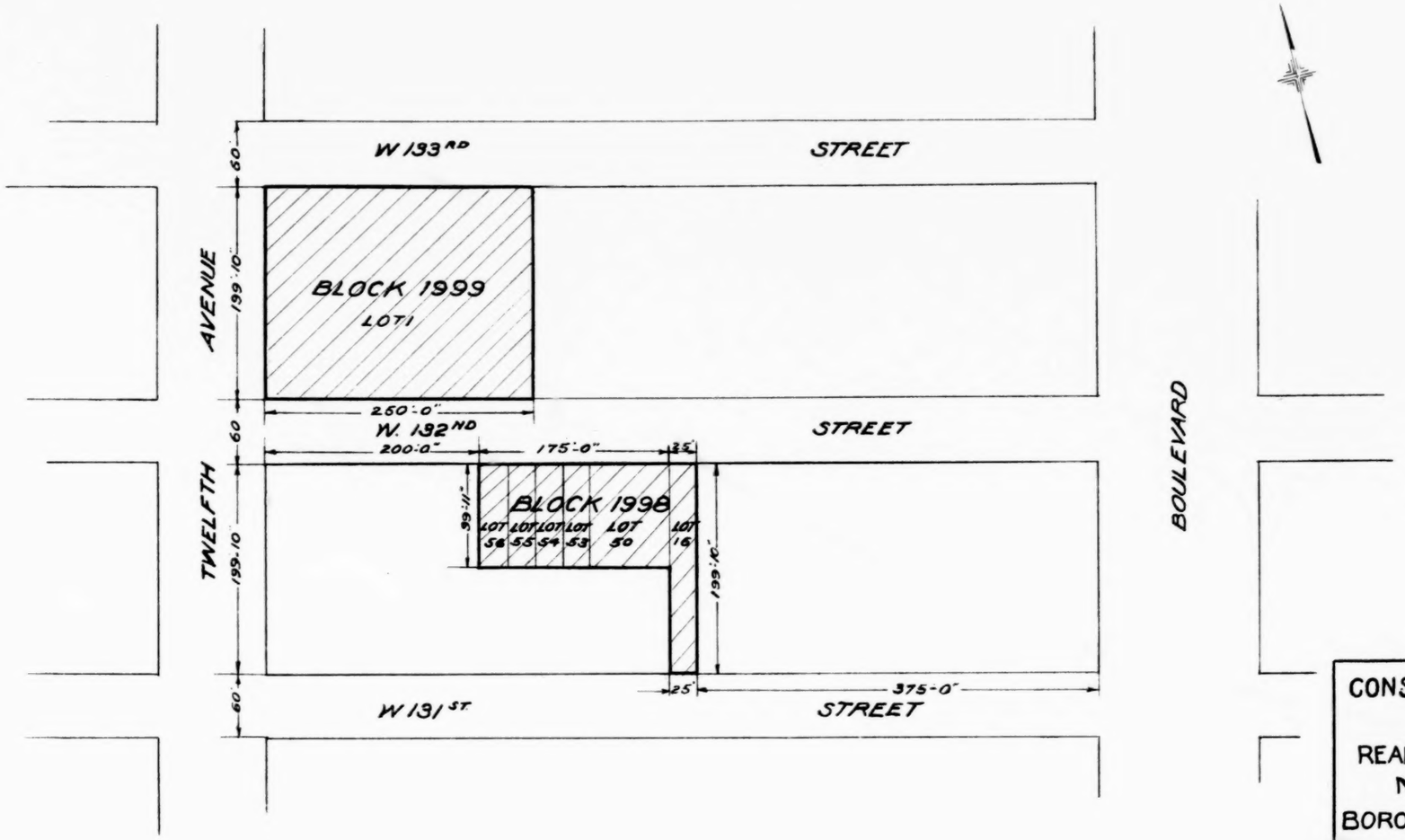


CONSOLIDATED GAS CO.
OF NEW YORK
REAL ESTATE IN BLOCKS
Nos. 1682, 1683, 1704, 1712
BOROUGH OF MANHATTAN
3295
SCALE 1 INCH-80 FEET



15

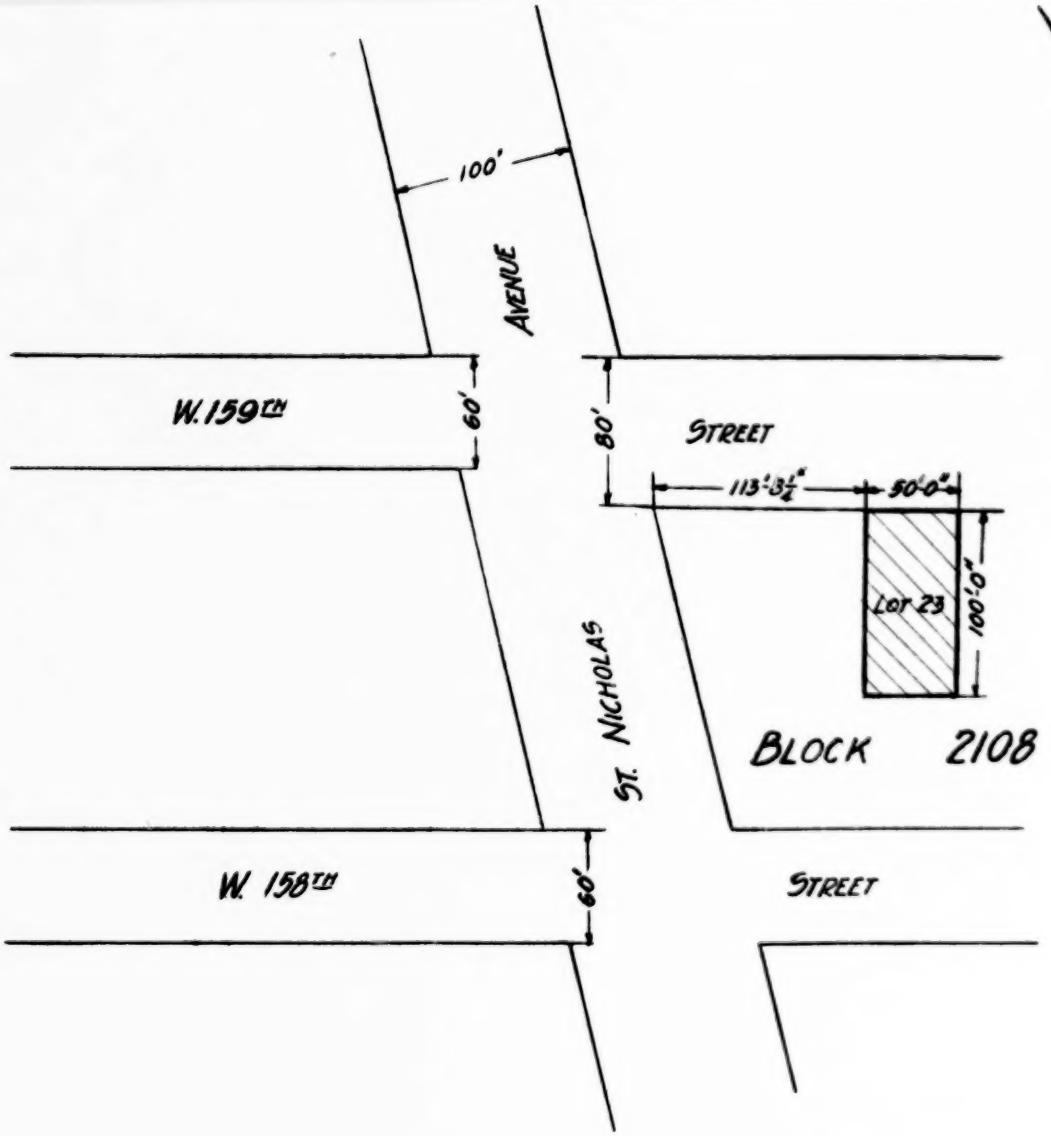
CONSOLIDATED GAS CO
OF NEW YORK
REAL ESTATE IN BLOCKS
Nos. 1642
BOROUGH OF MANHATTAN



(16)

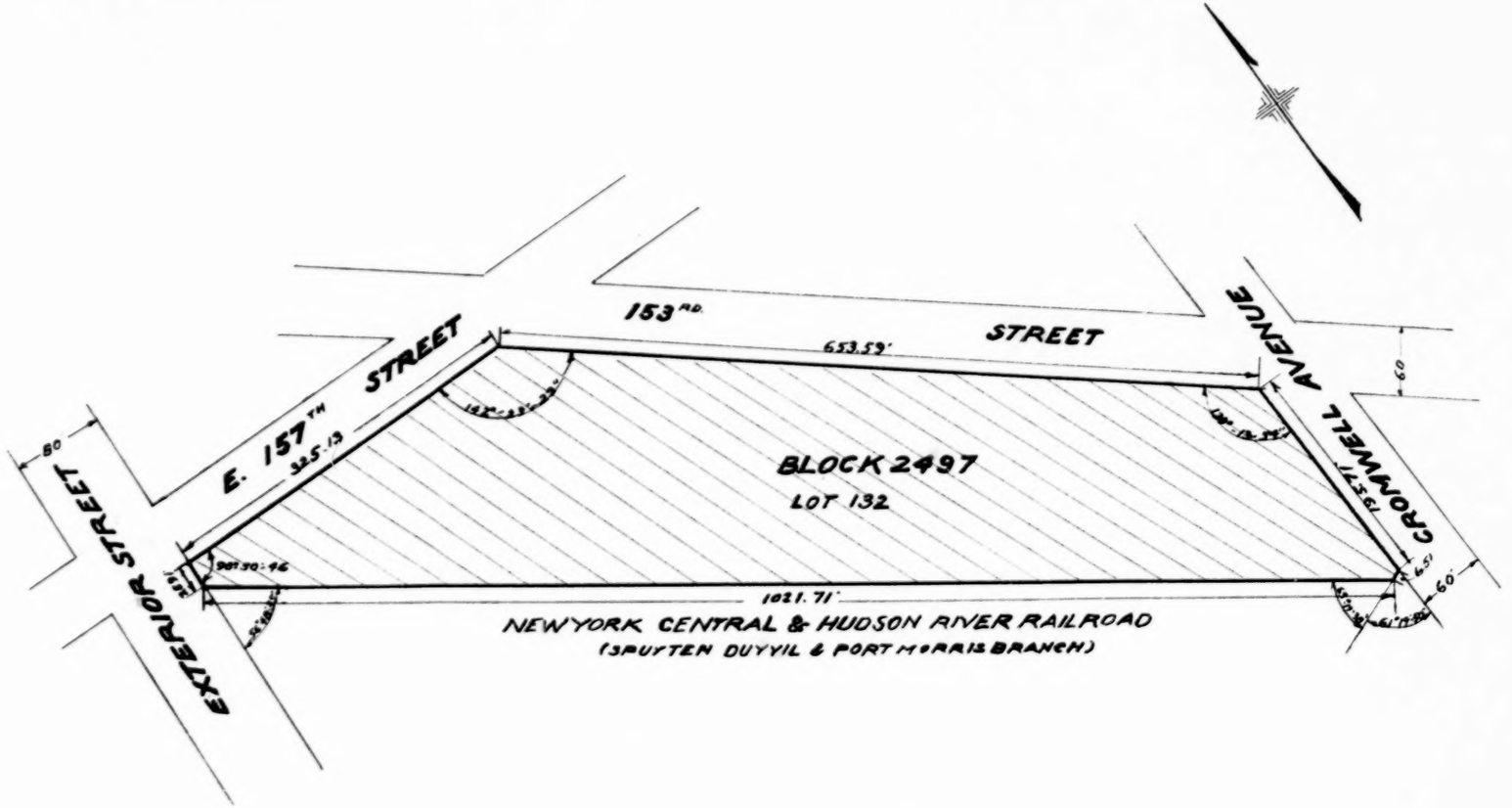
CONSOLIDATED GAS CO
OF NEW YORK
REAL ESTATE IN BLOCKS
Nos 1998, 1999
BOROUGH OF MANHATTAN

3297 SCALE 1 INCH = 80 FEET



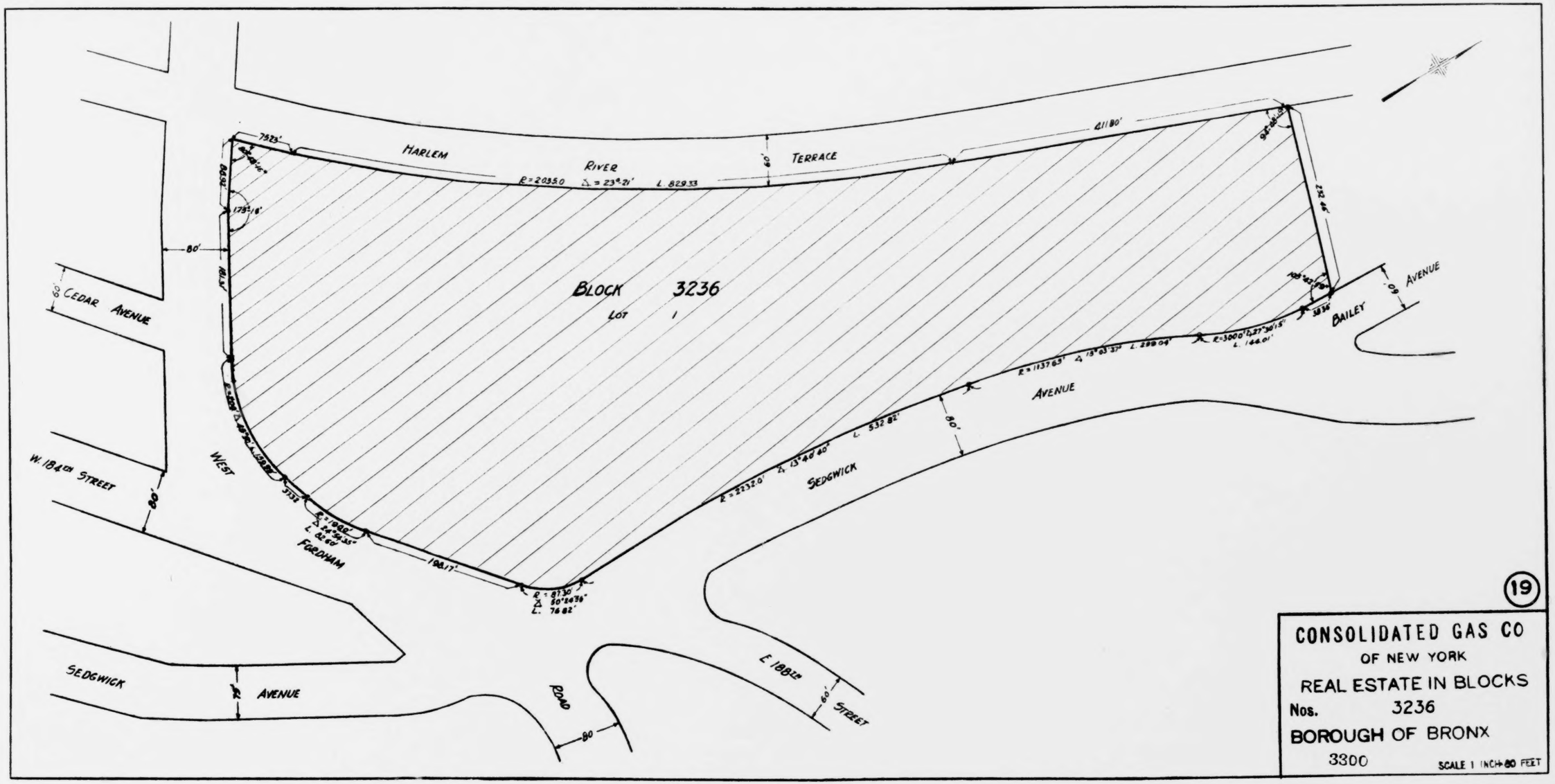
17

CONSOLIDATED GAS CO.
OF NEW YORK
REAL ESTATE IN BLOCKS
Nos. 2108
BOROUGH OF MANHATTAN



(18)

CONSOLIDATED GAS CO
OF NEW YORK
REAL ESTATE IN BLOCK
No 2497
BOROUGH OF BRONX
3299 SCALE 1 INCH = 80 FEET



19

CONSOLIDATED GAS CO
OF NEW YORK
REAL ESTATE IN BLOCKS
Nos. 3236
BOROUGH OF BRONX
3300
SCALE 1 INCH=80 FEET

MAPS

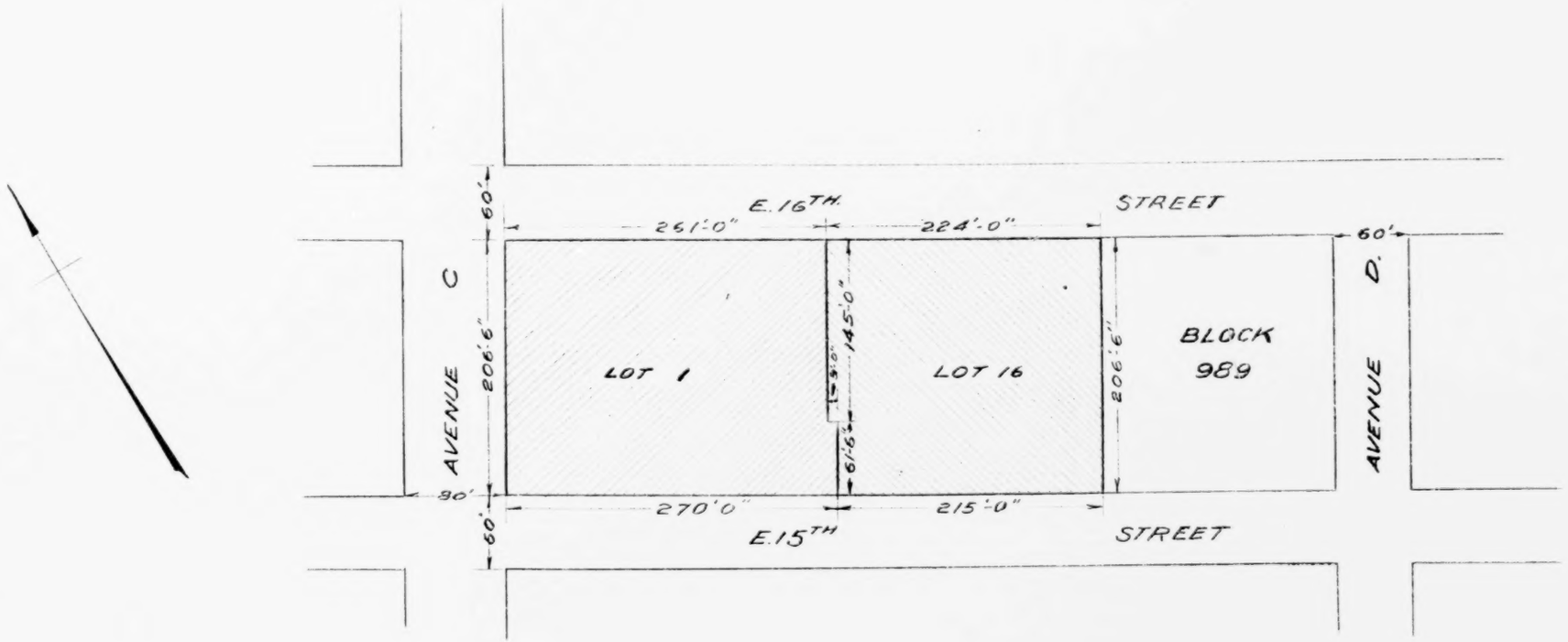
TOO

LARGE

FOR

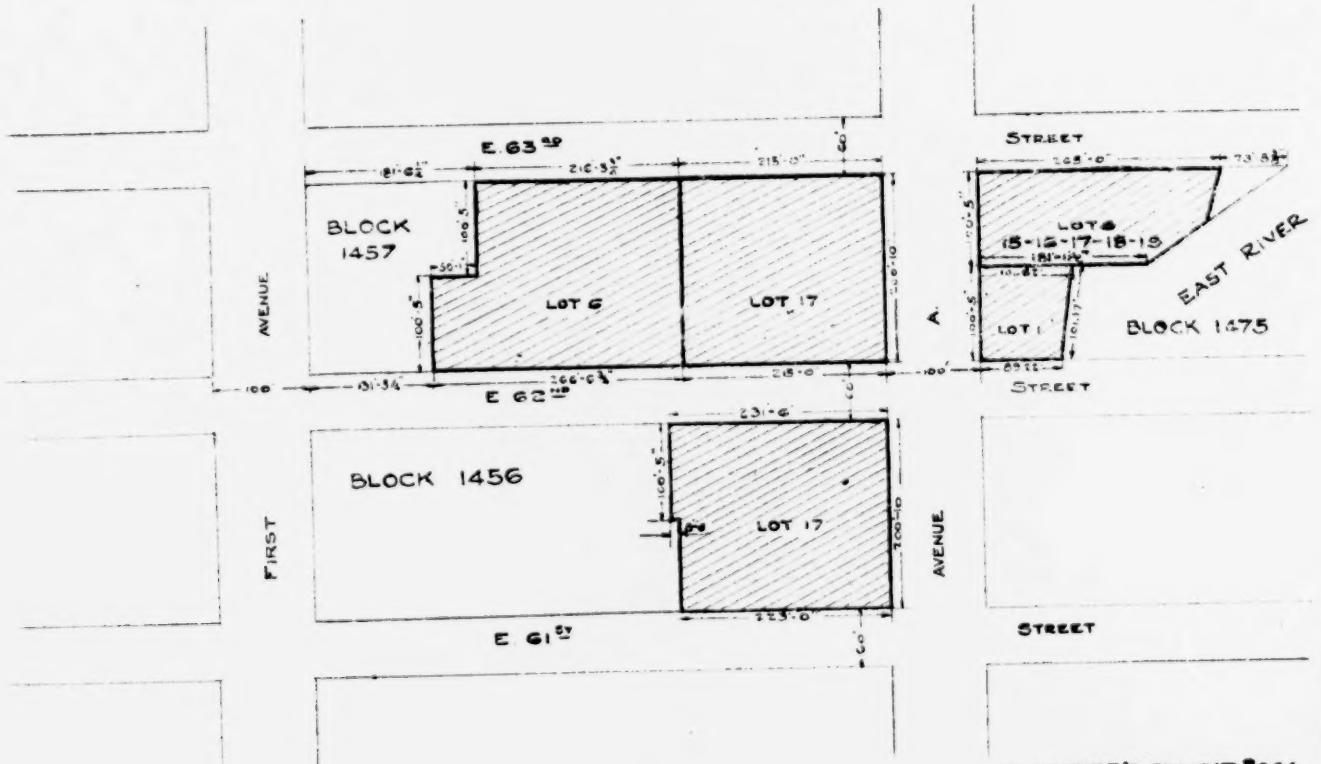
FILMING

PLAINTIFF'S EXHIBIT NO. 261



CONSOLIDATED GAS CO
OF NEW YORK
NEW AMSTERDAM GAS CO.
OF NEW YORK
REAL ESTATE IN BLOCK
NO. 989
BOROUGH OF MANHATTAN

PLAINTIFF'S EXHIBIT NO. 264

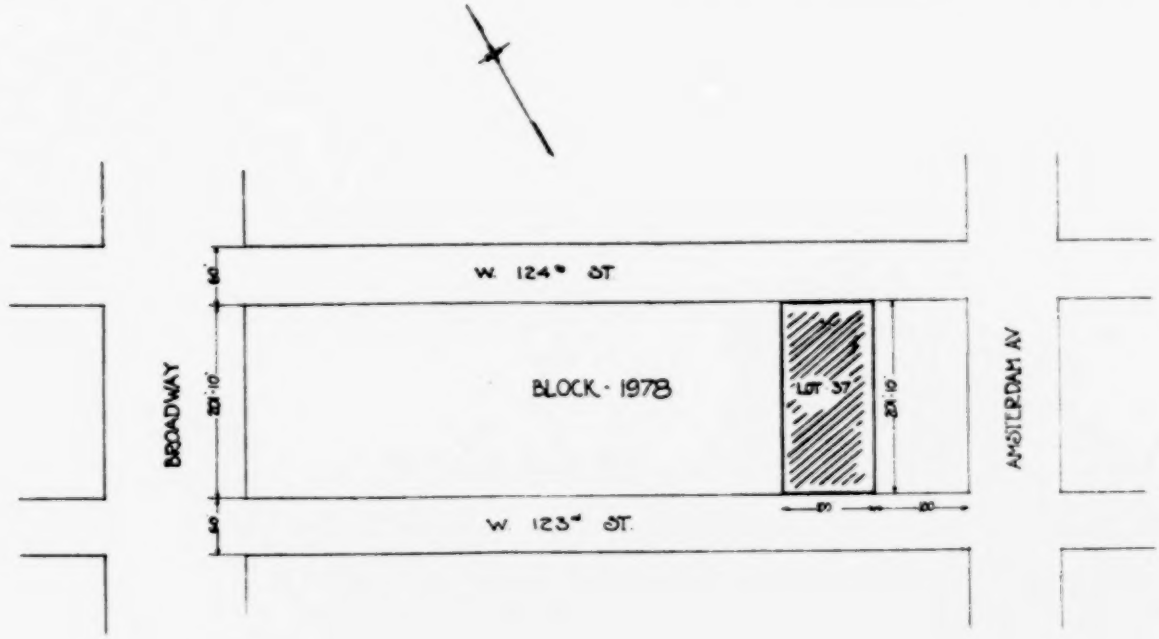


PLAINTIFF'S EXHIBIT #264
MARCH 5, 1924

CONSOLIDATED GAS CO. of NEW YORK
AND
STANDARD GAS LIGHT CO. of NEW YORK
REAL ESTATE IN BLOCKS
Nos. 1456, 1457, 1475
BOROUGH OF MANHATTAN
SCALE, 1 INCH = 80 FEET

3305

PLAINTIFF'S EXHIBIT NO. 265



STANDARD GAS LIGHT CO.
OF NEW YORK.
REAL ESTATE IN BLOCKS
Nos 1978
BOROUGH OF MANHATTAN

PLAINTIFF'S EXHIBIT #265
MARCH 5, 1924

3306

PLAINTIFF'S EXHIBIT NO. 268
(Exhibit 269 for Identification only)

REPRODUCTION COST OF LABOR AND MATERIAL NECESSARY FOR THE LAYING OF THE MAINS

OF THE CONSOLIDATED GAS COMPANYSOF NEW YORK

AS OF JUNE 1st, 1923.

SIZE	QUANTITY OF MAINS FEET	QUANTITY OF MAINS MANHATTAN FEET	QUANTITY OF MAINS BRONX FEET	MANHATTAN LABOR PER FOOT	MANHATTAN MATERIAL PER FOOT	MANHATTAN TOTAL PER FOOT	BRONX LABOR PER FOOT	BRONX MATERIAL PER FOOT	BRONX TOTAL PER FOOT	REPRODUCTION COST AS OF JUNE 1st, 1923.
48"Cast Iron	70,537.58	29,325.16	-	$20.902	$32.097	$52.999	-	-	-	$1,554,204.15
			41,212.42	-	-	-	$19.567	$29.668	$49.035	2,020,851.01
36" " "	36,991.66	15,585.16	-	15.524	18.507	34.031	-	-	-	530,378.58
			20,406.50	-	-	-	14.516	17.105	31.621	645,273.94
30" " "	167,512.17	165,430.17	-	11.360	13.991	25.351	-	-	-	4,195,820.24
			1,682.00	-	-	-	10.755	12.929	23.684	44,573.29
24" " "	62,951.66	61,178.66	-	8.181	10.145	19.324	-	-	-	1,182,216.43
			1,773.00	-	-	-	8.694	9.409	18.103	32,096.62
20" " "	210,098.92	208,550.92	-	6.720	7.622	14.342	-	-	-	2,991,037.29
			1,546.00	-	-	-	6.337	7.035	13.372	20,673.11
19" " "	29,596.25	29,596.25	-	5.415	6.434	11.849	-	-	-	350,686.97
16" " "	168,576.00	168,576.00	-	5.149	5.500	10.649	-	-	-	1,795,165.82
12" " "	394,104.08	393,336.08	-	4.001	3.738	7.739	-	-	-	3,044,027.94
			768.00	-	-	-	3.921	3.441	7.262	5,577.22
10" " "	87,871.17	87,871.17	-	3.524	2.702	6.226	-	-	-	547,085.90
8" " "	682,204.50	672,269.50	-	2.990	2.079	5.069	-	-	-	3,407,734.10
			9,935.00	-	-	-	2.966	1.934	4.900	48,681.50
6" " "	2,545,987.17	2,545,987.17	-	2.352	1.566	3.918	-	-	-	9,975,177.73
5" " "	2,057.50	2,057.50	-	2.159	1.378	3.537	-	-	-	7,277.38
4" " "	653,321.83	653,321.83	-	2.134	1.088	3.222	-	-	-	2,105,002.94
3" " "	101,403.66	101,403.66	-	2.099	.802	2.901	-	-	-	294,172.02
2" " "	4,341.66	4,341.66	-	1.672	.635	2.307	-	-	-	10,016.21
1½" " "	1,198.00	1,198.00	-	1.611	.481	2.092	-	-	-	2,506.22
Total Street Mains	5,217,551.61	5,140,028.69	77,522.92						SUB-TOTAL	$34,808,235.89
36" Harlem R.Main	1,102.00	-	-	-	-	-	-	-	-	327,269.01
24" " "	834.00	-	-	-	-	-	-	-	-	128,455.24
TOTAL MAINS -	5,219,487.61									602,678.37
				Plus Reproduction Cost of Pavement Paid for by Company, over mains, at least						760,045.68
				" 4.185% on $18,400,135.75 for Employees and Public Liability Insurance on Labor						238,549.08
				" Pavement Inspection and Permits (Borough of Manhattan)						216,000.00
				" City Inspection					GRAND TOTAL	$37,076,232.97

NOTE: The foregoing is exclusive of necessary charges for engineering, superintendence and contractor's profit, administrative, legal, engineering and miscellaneous general expense during construction, interest during construction on mains, and other undistributed structural costs.

NOTE: The foregoing is also exclusive of the reproduction cost of the pavement over mains existing on June 1st, 1923, in excess of the above stated reproduction cost of pavement paid for by the Company, amounting to $7,110,940.18 (Reproduction cost of all pavement $7,713,618.55, less reproduction cost of pavement paid for by Company, at least $602,678.37= Reproduction cost of pavement not included in above amount paid for by Company, $7,110,940.18).

REPRODUCTION COST OF LABOR AND MATERIAL NECESSARY FOR THE LAYING OF THE SERVICES OF THE CONSOLIDATED GAS COMPANY OF NEW YORK AS OF JUNE 1st, 1923.

SIZE	NUMBER AS OF JUNE 1st, 1923	LABOR PER SERVICE	MATERIAL PER SERVICE	CARTAGE PER SERVICE	TOTAL PER SERVICE	REPRODUCTION VALUE AS OF JUNE 1st, 1923.
6"	2	$50.418	$176.101	$ .451	$226.970	$453.94
6"	34	47.319	117.474	.451	165.244	5,618.30
5"	2	35.676	76.949	.451	113.076	226.15
4"	1352	34.181	59.871	.451	94.503	127,768.06
3"	10293	33.098	45.317	.451	78.866	811,767.74
2½"	376	32.738	39.994	.451	72.183	27,140.81
2"	25484	32.418	32.273	.451	65.142	1,660,078.73
1½"	15646	29.576	21.301	.451	51.328	803,077.89
1¼"	16406	29.576	21.392	.451	51.419	843,560.11
1"	9512	29.259	14.807	.451	44.517	423,445.70
¾"	433	29.180	13.308	.451	42.939	18,592.59
½"	27	29.060	12.701	.451	42.212	1,139.72
	79567				SUB-TOTAL	$4,722,889.74

Plus -	Reproduction Cost of Pavement paid for by company over services at least	611,510.23
"	4.18% on $2,466,822.39 for Employees and Public Liability Insurance on Labor	103,113.18
"	Pavement Inspection and Permits	101,771.20
"	City Inspection	18,000.00
	GRAND TOTAL	$5,557,284.35

NOTE: The foregoing is exclusive of necessary charges for engineering, superintendence and contractor's profit, administrative, legal, engineering and miscellaneous general expense during construction, interest during construction on services, and other undistributed structural costs.

The foregoing is also exclusive of the reproduction cost of the pavement over services existing on June 1st, 1923 in excess of the above stated reproduction cost of pavement paid for by the Company, amounting to $743,824.70 (reproduction cost of all pavement $1,355,334.93 less reproduction cost of pavement paid for by Company at least $611,510.23 = Reproduction Cost of pavement not included in above amount paid for by company $743,824.70).

HF

solidated Gas Company now desires to capitalize only the amount of $238,056.95, so as to make the total amount of its application in this case to be $30,000,000.

Based upon the foregoing, an order has been drawn and is herewith submitted to the Commission for its consideration, wherein the Consolidated Gas Company is authorized to issue 600,000 shares of its common capital stock without [fol. 3281] nominal or par value and to sell same at not less than $50.00 per share to realize net proceeds of at least $30,000,000, and to use said proceeds for the purposes hereinbefore referred to.

Respectfully submitted.

(Signed) Walter J. Fitzpatrick, Chief Accounting Division.

[fol. 3281a] Schedule attached to Plaintiff's Exhibit No. 256 is not printed.

(Here follow Plaintiff's Exhibits Nos. 258, 259, 260, 261, 264, 265, 268, and 270, marked side folio pages 3282, 3283, 3284, 3285, 3286, 3287, 3288, 3289, 3290, 3291, 3292, 3293, 3294, 3295, 3295, 3297, 3298, 3299, 3300, 3301, 3302, 3303, 3304, 3305, 3306, 3307, and 3308)

[fol. 3309]

PLAINTIFF'S EXHIBIT No. 813

(Admitted at Mine S. W. 4253, Apr. 22, 1924)

Consolidated Gas Company of New York

Cost of Production and Distribution, Year Ended December 31, 1922

[fol. 3310]

Consolidated Gas Company of New York

Quantities and Costs of Material and Labor—Water Gas Manufacture, Year Ended December 31, 1922

Cost of production—water gas:	Quantity	Unit price	Amount	Cost per M c. f. made	Material per M c. f. made
Generator Fuel—Coal	68,412.94 G. T.	$10.839 G. T.	$742,885.69	$.0905	18.68 lbs.
Coke	50,127.13 G. T.	9.292 G. T.	465,763.10	.0568	13.59 lbs.
Boiler Fuel —Coal	7,642.27 G. T.	10.860 G. T.	82,995.57	.0101	2.09 lbs.
Coke	9,467.93 G. T.	8.037 G. T.	76,091.87	.0093	2.59 lbs.
Water Gas Tar	5,025,599 Gals.	.048 Gal.	240,223.67	.0293	.61 Gal.
Labor, Cartage, etc., handling	.....	.....	120,220.26	.0146	.....
Total Water Gas Fuel	.....	.....	1,720,200.16	.2106	.....
Gas Oil	33,300,880 Gals.	.057 Gal.	1,898,900.97	.2514	4.06 Gals.
Water	15,964,830 C. F.	.001 C. F.	15,964.83	.0020	1.95 C. F.
Iron Mass	59,006 Bu.	.205 Bu.	12,119.34	.0016	.01 Bu.
Shavings	27,250 Bu.	.052 Bu.	1,418.51	.0002	.....
Sundry Supplies	.....	.....	6,663.69	.0008	.....
Labor, Cartage, etc., hauling spent material	.....	.....	29,645.13	.0036	.....
Total Material	.....	.....	3,692,912.43	.4501	.....

Deduct Residuals:						
Water Gas Tar produced	6,000,453	Gals.	.046 Gal.	286,619.09	.0349	.73 Gal.
Drip Oil produced	226,221	Gals.	.051 Gal.	11,614.29	.0014	.03 Gal.
Total Residuals				298,233.38	.0363	
Residual Expense				7,718.74	.0009	
Net Credit from Residuals				290,514.64	.0354	
Net Material				3,402,397.79	.4147	
Gas Making Labor				286,564.50	.0349	
Total Material and Labor				3,688,962.29	.4496	
Repairs				364,817.05	.0444	
Miscellaneous Works Expense				84,249.68	.0103	
Total Cost of Water Gas Made	8,204,826.000	C. F.		4,138,029.02	.5043	

[fol. 3311] Consolidated Gas Company of New York

Cost of Production, Year Ended December 31, 1922

	Cubic feet	Amount	Cost per M c. f.
Total Cost of Water Gas Made—forward	8,204,826,000	$4,138,029.02	$.5043
Gas purchased from			
Astoria Light, Heat and Power Co.	12,637,185,300	6,410,911.68	.5073
New Amsterdam Gas Co.	619,591,400	295,920.56	.4776
New York Mutual Gas Light Co. (Jan.-Aug. incl.)	538,320,900	272,845.77	.5068
Standard Gas Light Co.	71,609,500	33,457.51	.4672
	13,866,707,100	7,013,135.52	.5058
	22,071,533,100	11,151,164.54	.5052
Use of Manufacturing Plant Capacity:			
Astoria Light, Heat and Power Co.	.....	2,809,989.65	.....
New York Mutual Gas Light Co. (Jan.-Aug. incl.)	.....	96,181.69	.....
	.....	2,906,171.34	.1317
Gas Storage (Manufacturing and Storage Stations)	.....	244,688.35	.0111
Repairs, 14th Street and 42nd Street Reserve Plants (Coal Gas).	.....	19,258.52	.0009
Total Cost of Production	22,071,533,100	14,321,282.75	.6489
Increase in stock on hand	12,762,000		
Used by Company	62,138,900		
Gas Sales to Consumers	20,580,285,600		
	20,655,186,500		
Losses due to condensation, etc.	1,416,346,600	(6.42%)	
	22,071,533,100		

[fol. 3312] Consolidated Gas Company of New York

Cost of Production and Distribution, Year Ended December 31, 1922

	Amount	Cost per M c. f. sold
Total Cost of Production—forward	$14,321,282.75	$.6859
Cost of distribution and other expenses:		
Distribution Superintendence and Supplies and Expenses	516,169.66	.0251
Gas Meter and Installation Work	418,050.78	.0203
Work on Consumers Promises, Miscellaneous	536,361.93	.0261
Work on Consumers Promises, Gas Supply Inspection	96,096.09	.0047
Repairs of Gas Mains	179,405.23	.0087
Repairs of Gas Services	103,926.23	.0050
Repairs of Gas Meters	668,601.56	.0325
Repairs of Gas Distribution Tools	32,907.95	.0016
Repairs of Gas Appliances	283,557.77	.0138
Repairs of Buildings	19,428.10	.0009
Repairs of Street Lamps	924.76	.....
Commercial Expenses	1,514,098.42	.0736
Salaries—General Office	445,771.24	.0217
Supplies and Expenses—General Office	169,269.40	.0082
General Law Expense	128,112.62	.0062
Claims and Arrears Expense	25,731.20	.0012
Claims for Damages	3,679.78	.0002
Insurance	132,630.71	.0065
Vacations and Sickness	121,804.53	.0059
Contributions to Employees Mutual Aid Society	57,986.86	.0028
Superannuation	140,215.61	.0068
Stable and Automobile Expense	279,948.09	.0136
Miscellaneous General Expense	183,416.23	.0089
Undistributed Adjustments	74,037.62	.0036
Duplicate Gas Charges	75,680.40	.0037
Uncollectible Bills	71,029.60	.0035
Interest on Consumers Deposits	97,823.80	.0048
Use of Distributing System	600,615.08	.0292
Expense re Gas Rate Appeal No. 2	30,855.54	.0015
Expense re P. S. C. Hearings	43,491.65	.0021
Repairs, Insurance, etc. re property rented to others	1,236.35	.0001
Total Cost of Distribution and Other Expenses	6,753,933.15	.3282
Retirement Expense (20,580,285,600 C. F. of gas sold @ 3½¢ per M. C. F)	720,310.00	.0350
Taxes	1,805,624.40	.0906
Interest on Unpaid Taxes	129,141.00	.0063
Total Cost of Production, Distribution, etc.	23,790,291.30	1.1560

		Amount	Cost per M c. f. sold
Deduct Miscellaneous Operating Revenues:			
Gross Profit from Sale of Gas Appliances, etc.	296,714.29		
Rent of Gas Appliances	1,465,979.77		
Interest on Bank Balances, etc.	47,180.29		
Rentals of Jointly used Facilities (Less 8% return on investment)	107,317.49		
Miscellaneous Rent Revenues	44,549.76		
		1,961,741.60	.0953
Net Operating Expenses		21,628,549.70	1.0507

NOTE.—The sales of gas for the year ended December 31, 1922 amounted to 20,580,285,600 C. F. and the revenue therefrom amounted to $25,168,708.89 or an average of $1.223 per M C. F.

The rates in effect were as follows: Lighting Municipal Buildings, 75¢ per M C. F. (117,601,700 C. F.); Commercial Metered Lighting and Prepaid Gas, $1.25 per M C. F. for gas consumed prior to October 1, 1922. Block rate with maximum of $1.15 per M C. F. effective October 1, 1922.

[fol. 3313] PLAINTIFF'S EXHIBIT NO. 814

Consolidated Gas Company of New York

Statement of Taxes Year Ended December 31, 1922, to Accompany Statement of Cost of Production and Distribution Year Ended December 31, 1922

[fol. 3314] Consolidated Gas Company of New York

Summary of Taxes, Year Ended December 31, 1922

New York State Taxes:		
Gross Earnings, folio 2	194,391 58	
Less: amount not applicable to Gas Business	60,061 25	
		134,330 33
Excess Dividend, folio 3	105,184 38	
Less: amount not applicable to Gas Business	76,816 15	
		28,368 23
New York City Taxes:		
Real Estate, folios 4 6	735,934 41	
Less: amount not applicable to Gas Business	79,163 09	
		656,771 32

Real Estate of Corporations folio 7		336,308 51
Special Franchise, folio 8		352,913 65
Personal (1/3 of $685.00 assessed vs. N. Y. Mutual Gas Light Co.)		228 33
U. S. Government Taxes:		
Capital Stock, folio 9	139,541 00	
Less: amount not applicable to Gas Business	95,194 87	
		44,346 13
Federal Income:		
Estimated tax per books	350,000 00	
Loss: adjustment on books 1923 to conform to tax as finally determined.	37,642 10	
		312,357 90
Total taxes applicable to Gas Business		1,865,624 40
Total taxes not applicable to Gas Business		311,235 36
		2,176,859 76

Reconciliation with Books

Taxes	1,895,860 35	
Miscellaneous Operating Revenue Deductions—Taxes	89,655 96	
Non-Operating Revenue Deductions—Taxes	228,985 53	
	2,214,501 86	
Less: adjustment of Federal Income Tax in 1923	37,642 10	
		2,176,859 76

[fol. 3315] NOTE.—In addition to the foregoing amount of taxes applicable to the gas business ($1,865,624.40), there are included in the charges by the affiliated companies

against the Consolidated Gas Co., the following amounts for taxes:

Included in Purchased Gas	32,054 53
Included in Use of Manufacturing Plant Capacity.	568,103 05
Included in Use of Distributing System	107,826 83
	707,984 41

[fol. 3316] Consolidated Gas Company of New York

Statement Showing Distribution of New York State Gross Earnings Tax Based upon Gross Earnings for the Year Ended October 31, 1922

	Applicable to gas business	Not applicable to gas business
Gas Sales less Uncollectible Bills and Allowances	24,711,696.12	.....
Bond Income	.....	879,832.79
Interest on Loans and Investments	.....	1,678,362.20
Dividends Received	.....	8,734,685.75
Gas Appliance Rents	1,693,141.21	.....
Gas Merchandise Revenue	230,194.54	.....
Miscellaneous Rent Revenue	*18,760.41	447,820.33
Joint Gas Rent Revenue	*124,746.56	169,528.13
Insurance Fund Income	.....	1,180.00
Interest on N. Y. City Corporate Stock	.....	127.50
Interest on Bank Balances	45,294.21	.....
Wharfage	384.25	.....
Interest and Compensation—Liberty Bonds	.....	56,578.53
Interest on Fire Insurance Participation Certificates	.....	19,155.26
Interest on Consumers Final Bills	223.04	.....
Interest on deferred payments (Armbro Stores and Garage Corpn.)	.....	23,125.01
Interest on Unpaid Oil bills (N. Y. and Richmond Gas Co.)	.....	1,803.40
Residuals Sold	41,625.63	.....
Miscellaneous Revenue	.....	51.22
	26,866,065.97	12,012,250.12
	12,012,250.12	.....
Total Gross Income used as basis for tax	38,878,316.09	.....

Distribution of Tax

Applicable to Gas Business	$26,866,065.97	@ ½ of 1%	134,330.33
Not applicabe to Gas Business	12,012,250.12	@ ½ of 1%	60,061.25
			194,391.58

*The Company, in distributing the Gross Earnings tax, treated these items as being wholly applicable to Gas Operations.

[fol. 3317] Consolidated Gas Company of New York

Statement Showing Distribution of New York State Excess Dividends Tax Based upon Dividends Paid in Excess of 4% During the Year Ended October 31, 1922

Amount of Dividends paid, year ended October 31, 1922....	7,767,947.00
Dividends @ 4% per annum on average amount of Capital Stock outstanding ($106,545,025.00) year ended October 31, 1922.....	4,261,801.00
Dividends paid in excess of 4%.....	3,506,146.00
Tax—3% on Excess.....	105,184.38

Basis for Distribution of Tax by Company

		Applicable to gas business	Not applicable to gas business
Gas Sales (net).....		24,777,176.42	.....
Miscellaneous Operating Revenue.....		2,435,575.40	.....
Non-operating Revenue.....		.....	2,545,721.71
Dividends received.....		.....	8,734,685.75
Profit and Loss entries, net credit.....		.....	466,718.52
Total credits, year ended October 31, 1922		27,212,751.82	11,747,125.98
Deduct:			
Cost of Production.....		13,723,024.08	.....
Cost to Distribute.....		7,218,393.56	.....
Renewals and Replacements.....		697,117.14	.....
Taxes		2,003,653.10	.....
Interest on Unpaid Taxes.....		150,444.67	.....
Interest on Consumers Deposits.....		75,462.03	.....
Interest on Bonds, Loans, etc.....	.....	.....	3,205,635.87
Profit and Loss entries, net debit.....		190,337.99	.....
Total Debits, year ended October 31, 1922		24,058,432.57	3,205,635.87
Total net credit.....	11,695,809.36	3,154,319.25	8,541,490.11
	100%	26.97%	73.03%

Distribution of Tax by Company

Applicable to Gas Business..... 26.97% of	105,184.38	28,368.23
Not applicable to Gas Business... 73.03% of	105,184.38	76,816.15
		105,184.38

[fol. 3318] Consolidated Gas Company of New York

Real Estate Taxes Applicable to the Gas Business, Year Ended December 31, 1922

Borough of Manhattan:

Block	Lot		
239	1)	Branch No. 1, Meter Shop and Street Dep't	3,437 50
239	5)	Hester and Elizabeth Streets	1,375 00
239	7)		1,045 00
368	1)		*38,041 66
369	1)		*14,666 67
369	10)		*55 00
369	11)	11th Street Manufacturing Station	*9 17
369	12)	Ave. D, 11th Street to 13th Street	*68 75
369	13)		*36 67
369	14)		*458 33
369	15)		*440 00
382	22)		*15,720 83
870	47) 60)	General Office Building, 15th Street and Irving Place	**27,421 28
951	35	Stable—20th Street between Ave. A and 1st Ave.	1,650 00
952	7	Storage Holders—20th and 21st Streets, between Ave. A and 1st Ave.	13,750 00
952	35	Governor House—21st Street and Ave. A	1,567 50
952	29)	Storage—20th Street and Ave. A	302 50
	30)		852 50
953	1	Central Garage and Holders—21st to 22nd Streets, Ave. A to 1st Ave.	24,062 50
978	5)		646 24
978	6)	21st Street Manufacturing Station	24,585 00
979	1)	Ave. A, 20th to 22nd Streets	55,000 00
979	27)		192 50

*¼ of total tax (property purchased as of Aug. 31, 1922.)
**35.16% of total tax (64.84% rented).

Block	Lot		
987	37	Oil Tanks and Storage—Ave. B, 20th to 21st Streets	5,142 50
			230,527 10
[fol. 3319]		Brought Forward	230,527 10
		Borough of Manhattan—Continued:	
982	13)		10,560 00
988	1)	14th Street Manufacturing Station	42,418 74
991	1)	Avenues C & D, 14th to 15th Streets	4,977 50
	47)		1,540 00
989	1	Holder Station—Ave. C, 15th to 16th Streets	13,516 24
985	7)		5,362 50
	19)	Storage Yard—17th to 18th Streets Between Aves. B and C	192 50
	20)		192 50
1028	38	Branch No. 4—212 W. 57th Street	18,700 00
1089	1)		75,625 00
1107	7)	42nd Street Manufacturing Station	11,962 50
1090	23)	11th Ave., 41st to 42nd Streets	2,887 50
1092	7 & 16)	Holder Station—45th Street West of 11th Ave.	*11,079 75
1093	9)		11,825 00
1157	1	Holder Station—65th Street Amsterdam Ave. to West End Ave.	45,375 00
1177	21	Meter Shop and Street Dep't—66th Street West of West End Ave.	9,762 50
1457	6	Holder Station—62nd to 63rd Streets East of 1st Ave.	19,800 00
1642	33	Branch No. 62084 3rd Ave. cor. 114th St.	2,612 50

*68% of portion of tax paid by Company (32% rented).

Block	Lot		
1670	1)	99th Street Manufacturing Station	33,687 50
1692	1)	98th to 99th Streets, 2nd Ave. to Marginal Street	6,737 50
1682	8)	Holder Station—1st Ave., 110th to 111th Streets	275 00
	11)		26,812 50
1683	18	Street Dep't, Shop and Pipe Storage—111th Street and 1st Ave.	2,227 50
1704	5	Stable, Garage and Coke Storage Plant—110th to 111th Streets East of 1st Ave.	11,330 00
1712	2	Dock and Coke Conveyor—110th to 111th Streets and East River	1,443 74
		Forward	601,430 57
[fol. 3320]		Brought Forward	601,430 57
		Borough of Manhattan—Continued:	
1998	50)		1,512 50
	53)		192 50
	54)	Holder Station—West 132nd Street near 12th Ave.	192 50
	55)		192 50
	56)		192 50
1999	1)		24,200 00
2108	23	Meter Shop—474 West 159th Street	1,457 50
		Borough of the Bronx:	
3236	1	Kingsbridge Holder Station—Sedgwick Ave. and Fordham Road	30,305 00
			659,675 57

Less: Assessments for local improvements included in tax rate and capitalized by Company		2,904 25
Total Real Estate taxes applicable to the Gas Business		656,771 32

[fol. 3321] Consolidated Gas Company of New York

Real Estate of Corporation's Taxes, Year Ended December 31, 1922

Consolidated Gas Co.:		
Borough of Manhattan		1,100 00
Borough of the Bronx		247 50
N. Y. Mutual Gas Light Co.:		
Borough of Manhattan, 2nd half	1 37	
⅔ thereof applicable to period subsequent to August 31, 1922		92
Harlem Gas Light Co.:		
Borough of Manhattan		44,687 50
Knickerbocker Gas Light Co.:		
Borough of Manhattan		54,312 50
Manhattan Gas Light Co.:		
Borough of Manhattan		71,500 00
Metropolitan Gas Light Co.:		
Borough of Manhattan		59,125 00
Municipal Gas Light Co.:		
Borough of Manhattan		47,437 50
Borough of the Bronx		4,125 00
N. Y. Gas Light Co.:		
Borough of Manhattan		55,000 00
		337,535 92

Less assessments for local improvements included in tax rate and capitalized by Company		1,227 41
		336,308 51

[fol. 3322] Consolidated Gas Company of New York

Special Franchise Taxes, Year Ended December 31, 1922

Consolidated Gas Company:

Borough of Manhattan		310,151 26
Borough of the Bronx		31,619 52

N. Y. Mutual Gas Light Company:

Borough of Manhattan, 2nd half	18,783 43	
$\frac{2}{3}$ thereof applicable to period subsequent to August 31, 1922		12,522 28
		354,293 06
Less assessments for local improvements included in tax rate and capitalized by Company		1,379 41
		352,913 65

[fol. 3323] Consolidated Gas Company of New York

Statement Showing Distribution of Federal Capital Stock Tax

"Fair Value" of Capital Stock (Less $5,000,000 exemption) based upon Balance Sheet of December 31, 1921 (per tax return to U. S. Government)	139,541,057.19
Tax=$1.00 per $1,000.00 of "Fair Value"	139,541.00

PLAINTIFF'S EXHIBIT NO. 815

CONSOLIDATED GAS COMPANY OF NEW YORK

Summaries of

Purchased Gas

Use of Manufacturing Plant Capacity

Use of Distributing System

Year ended December 31, 1922

to accompany

Statement of Cost of Production and Distribution

Year ended December 31, 1922

PATTERSON, TEELE AND DENNIS,

ACCOUNTANTS AND AUDITORS,

NEW YORK, BOSTON, BALTIMORE AND WASHINGTON

#9858

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CONSOLIDATED GAS COMPANY OF NEW YORK

SUMMARY OF PURCHASED GAS

YEAR ENDED DECEMBER 31, 1922

	PURCHASED GAS				BASIS FOR CHARGE							
					"STATION COST"				GENERAL & MISC. EXPENSES		GROSS EARNINGS TAX	
	CUBIC FEET	AMOUNT		PER M.C.F.	AMOUNT		PER M.C.F.		AMOUNT	PER M.C.F.	AMOUNT	PER M.C.F.
Astoria Light, Heat & Power Co.	12,637,185,300	6410 911	68	50.73	6271 463	17	49.63		107 393 98	.85	32 054 53	.25
New Amsterdam Gas Co.	619,591,400	295 920	56	47.76	295 920	56	47.76					
N. Y. Mutual Gas Light Co.*	538,320,900	272 845	77	50.68	272 845	77	50.68					
Standard Gas Light Co.	71,609,500	33 457	51	46.72	33 457	51	46.72					
	13,866,707,100	7013 135	52	50.58	6873 687	01			107 393 98		32 054 53	

*Jan. - Aug. incl.

CONSOLIDATED GAS COMPANY OF NEW YORK

SUMMARY OF USE OF MANUFACTURING PLANT CAPACITY

YEAR ENDED DECEMBER 31, 1922

	INVESTMENT	CARRYING CHARGES — TOTAL RATE PER ANNUM	CARRYING CHARGES — TOTAL AMOUNT	RETURN ON INVESTMENT 8%	TAXES 2½%	RENEWALS & REPLACEMENTS & INSURANCE 1½%
Astoria Light, Heat and Power Co.						
Plant, Holders and Accessories	18 666 500 81	12%	2 239 980 10	1 493 320 07	466 662 52	279 997 51
Land	3 220 053 51	10½%	338 105 62	257 604 28	80 501 34	
Working Capital	2 898 799 17	8%	231 903 93	231 903 93		
			2 809 989 65	1 982 828 28	547 163 86	279 997 51
New York Mutual Gas Light Co. (Jan. - Aug. incl.)						
Plant, Holders and Accessories	823 707 64	12%	65 896 62	43 931 08	13 728 46	8 237 08
Land	432 643 90	10½%	30 285 07	23 074 34	7 210 73	
			96 181 69	67 005 42	20 939 19	8 237 08
Total Use of Manufacturing Plant Capacity			2 906 171 34	2 049 833 70	568 103 05	288 234 59

3326

CONSOLIDATED GAS COMPANY OF NEW YORK

SUMMARY OF USE OF DISTRIBUTING SYSTEM

YEAR ENDED DECEMBER 31, 1922

	INVESTMENT	CARRYING CHARGES					
		TOTAL		RETURN ON INVESTMENT 8%	TAXES 2½%	MAINTENANCE 2%	RENEWALS & REPLACEMENTS & INSURANCE 1½%
		RATE PER ANNUM	AMOUNT				
East River Gas Co. of L.I. City							
Astoria Tunnel	3187 639 39	14%	446 269 52	255 011 15	79 690 99	63 752 79	47 814 59
Ravenswood Tunnel	430 970 49	14%	60 335 86	34 477 64	10 774 26	8 619 41	6 464 55
48" and 60" Mains on Long Island	520 977 21	14%	72 936 81	41 678 18	13 024 43	10 419 54	7 814 66
			579 542 19	331 166 97	103 489 68	82 791 74	62 093 80
Standard Gas Light Co.							
48" Harlem River Main	121 848 62	14%	17 058 81	9 747 89	3 046 22	2 436 97	1 827 73
62nd St. Governor and Valve House							
Plant	40 098 86	12%	4 811 86	3 207 91	1 002 47		601 48
Land	11 538 46	10½%	1 211 54	923 08	288 46		
Leasehold	6 923 08	8%	553 85	553 85			
			23 636 06	14 432 73	4 337 15	2 436 97	2 429 21
			603 178 25	345 599 70	107 826 83	85 228 71	64 523 01
Deduct : Allowance by East River Gas Co. for Consolidated Gas. Company's proportion of rental received from Electric Companies for use of cable space in Astoria Tunnel			2 363 17				
Total Use of Distributing System			600 815 08				

Basis for Distribution of Tax by Company

Assets for Balance Sheet December 31, 1921 (Contras Eliminated)

		Applicable to gas business	Not applicable to gas business
Fixed Assets		55,246,040.16	.....
Material and Supplies		1,706,695.80	.....
Securities owned (exclusive of Liberty Bonds)		.....	108,351,379.23
U. S. Government Liberty Bonds		.....	2,502,000.00
Loans Receivable		.....	21,575,500.00
Accrued Interest Receivable		.....	425,594.74
Cash		2,178,480.35	.....
Accounts Receivable (Sundry Consumers, Sundry Debtors, etc.)		2,193,400.01	.....
Items in Suspense		645,169.80	.....
Unamortized Debt Discount and Expense		.....	344,144.56
Total	195,228,404.74	62,029,786.12	133,198,618.62
	100%	31.78%	68.22%

Distribution of Tax by Company

Applicable to Gas Business	31.78% of	139,541.00	44,346.13
Not applicable to Gas Business	68.22% of	139,541.00	95,194.87
			139,541.00

(Here follows Plaintiff's Exhibit No. 815, marked side folio pages 3324, 3325, 3326, and 3327)

[fol. 3328] PLAINTIFF'S EXHIBIT No. 816

Consolidated Gas Company of New York

Cost of Production and Distribution, Year Ended December 31, 1923

[fol. 3329] Consolidated Gas Company of New York

Quantities and Costs of Material and Labor—Water Gas Manufacture, Year Ended December 31, 1923

Cost of production—water gas:	Quantity	Unit price	Amount	Cost per M c. f. made	Material per M c. f. made
Generator Fuel—Coal	104,731.67 G. T.	$10.664 G. T.	$1,116,838.57	$.1139	23.93 lbs.
Coke	39,283.41 G. T.	9.966 G. T.	391,506.51	.0399	8.98 lbs.
Boiler Fuel —Coal	16,828.72 G. T.	10.650 G. T.	179,233.03	.0183	3.84 lbs.
Coke	10,455.52 G. T.	6.334 G. T.	66,226.30	.0068	2.39 lbs.
Water Gas Tar	5,568,027 Gals.	.048 Gal.	266,428.51	.0272	.57 Gal.
Labor, Cartage, etc., handling	.....	.....	144,364.69	.0147	.....
Total Water Gas Fuel	.....	.....	2,164,597.61	.2208	.....
Gas Oil	36,264,892 Gals.	.055 Gal.	2,000,021.80	.2040	3.70 Gals.
Water	23,110,040 C. F.	.001 C. F.	23,110.04	.0023	2.36 C. F.
Iron Mass	94,020 Bu.	.213 Bu.	19,979.94	.0020	.01 Bu.
Shavings	42,010 Bu.	.045 Bu.	1,871.93	.0002	.....
Sundry Supplies	.....	.....	8,968.00	.0009	.....
Labor, Cartage, etc., handling spent material	.....	.....	51,556.00	.0053	.....
Total Material	.....	.....	4,270,105.32	.4355	.....

Deduct Residuals:						
Water Gas Tar produced	6,211,056	Gals.	.048 Gal.	296,578.52	.0302	.62 Gal.
Drip Oil produced	276,349	Gals.	.060 Gal.	16,700.95	.0017	.93 Gal.
Total Residuals				313,279.47	.0319	
Residual Expense				8,082.57	.0008	
Net Credit from Residuals				305,196.90	.0311	
Net Material				3,964,908.42	.4044	
Gas Making Labor				375,139.60	.0383	
Total Material and Labor				4,340,048.02	.4427	
Repairs				433,023.64	.0442	
Miscellaneous Works Expense				104,057.94	.0106	
Total Cost of Water Gas Made	9,804,127,000	C. F.		4,877,129.60	.4975	

23231

[fol. 2330] Consolidated Gas Company of New York

Cost of Production, Year Ended December 31, 1923

	Cubic feet	Amount	Cost per M c. f.
Total Cost of Water Gas Made—forward	9,804,127,000	$4,877,129.60	$.4975
Gas purchased from—			
Astoria Light, Heat and Power Co.	15,017,903,700	6,921,577.78	.4609
New Amsterdam Gas Co.	314,253,400	146,937.58	.4676
Standard Gas Light Co.	87,691,400	41,591.02	.4788
	15,419,848,500	7,110,586.38	.4611
	25,223,975,500	11,987,635.98	.4752
Use of Manufacturing Plant Capacity:			
Astoria Light, Heat and Power Co.	.....	2,507,258.67	.0994
Gas Storage (Manufacturing and Storage Stations)	.....	267,623.19	.0106
Repairs, 14th Street and 42nd Street Reserve Plants (Coal Gas)	.....	9,574.36	.0004
Total Cost of Production	25,223,975,500	14,772,092.20	.5856
Increase in stock on hand	4,620,000		
Used by Company	75,447,000		
Gas Sales to Consumers	24,057,694,200		
	24,137,761,800		
Losses due to condensation, etc.	1,086,213,700	(4.31%)	
	25,223,975,500		

Cost of Production and Distribution, Year Ended December 31, 1923

	Amount	Cost per M c. f. sold
Total Cost of Production—forward	$14,772,092.20	$.6140
Cost of distribution and other expenses:		
Distribution Superintendence and Supplies and Expenses	609,138.81	.0253
Gas Meter and Installation Work	498,615.90	.0207
Work on Consumers Premises, Miscellaneous	636,528.92	.0209
Work on Consumers Premises, Gas Supply Inspection	100,101.06	.0042
Repairs of Gas Mains	187,263.59	.0078
Repairs of Gas Services	159,168.27	.0066
Repairs of Gas Meters	541,928.56	.0225
Repairs of Gas Distribution Tools	42,709.84	.0018
Repairs of Gas Appliances	252,046.59	.0105
Repairs of Buildings	30,139.75	.0013
Repairs of Street Lamps	1,317.18	.0001
Commercial Expenses	1,071,811.72	.0285
Salaries—General Office	508,642.11	.0211
Supplies and Expenses—General Office	301,154.11	.0125
General Law Expense	49,679.10	.0021
Claims and Arrears Expense	27,632.06	.0011
Claims for Damages	6,264.57	.0003
Insurance	158,546.42	.0066
Vacations and Sickness	143,974.04	.0060
Contributions to Employees' Mutual Aid Society	85,165.82	.0035
Superannuation	158,968.18	.0066
Stable and Automobile Expense	288,613.11	.0120
Miscellaneous General Expense	176,061.06	.0073
Undistributed adjustments	134,658.00	.0056
Duplicate Gas Charges	84,122.70	.0035
Uncollectible Bills	110,734.41	.0046
Interest on Consumers Deposits	94,032.42	.0039
Use of Distributing System	474,335.49	.0197
Expense re Gas Rate Appeal No. 3	86,478.06	.0036
Expense re P. S. C. Hearings	113.56	.....
Repairs, Insurance, etc., re property rented to others	547.77	.....
Total Cost of Distribution and Other Expenses	7,172,211.18	.2981
Retirement Expense (24,057,694,200 C. F. of gas sold @ 3½c per M C. F.)	842,019.30	.0350
Taxes	1,824,209.33	.0758
Interest on Unpaid Taxes	115,042.57	.0048
Total Cost of Production, Distribution, etc.	24,725,574.58	1.0277
Deduct Miscellaneous Operating Revenues:		
Gross Profit from Sale of Gas Appliances, etc. 350,133.90		
Rent of Gas Appliances 1,547,152.89		
Interest on Bank Balances, etc. 38,638.74		
Rentals of Jointly used Facilities (Less 8% return on investment) 64,469.57		
Miscellaneous Rent Revenues 75,865.12		
	2,096,260.22	.0871
Net Operating Expenses	22,629,314.36	.9406

NOTE.—The sales of gas for the year ended December 31, 1923 amounted to 24,057,694,200 C. F. and the revenue therefrom, excluding the amount carried in suspense, amounted to $25,968,078.77 or an average of $1.079 per M C. F.

The rates in effect were as follows: Lighting Municipal Buildings, 75c per M C. F. (130,388,700 C. F.). Commercial Metered Lighting and Prepaid Gas, Block rates with maximum of $1.15 per M C. F.

The amount billed to consumers in excess of $1.00 per M C. F. for gas consumed subsequent to June 1, 1923 was credited to a suspense account and the balance therein at December 31, 1923 was $1,525,016.48.

(Here follow side folio pages 3332, 3333, 3334, and 3335)

[fol. 3336] PLAINTIFF'S EXHIBIT No. 817

Consolidated Gas Company of New York

Statement of Taxes, Year Ended December 31, 1923, to Accompany Statement of Cost of Production and Distribution, Year Ended December 31, 1923

[fol. 3337] Consolidated Gas Company of New York

Summary of Taxes, Year Ended December 31, 1923

New York State Taxes:		
Gross Earnings, folio 2	218,822.34	
Less amount not applicable to Gas Business	74,224.20	
		144,598.14
Excess Dividend, folio 3	244,638.67	
Less amount not applicable to Gas Business	195,833.26	
		48,805.41
New York City Taxes:		
Real Estate, folios 4-6	867,789.28	
Less amount not applicable to Gas Business	67,576.07	
		800,213.21
Real Estate of Corporations, folio 7	336,623.79	
Less amount cancelled in 1924.	335,269.03	
		1,354.76
Special Franchise, folio 8		363,946.68

CONSOLIDATED GAS COMPANY OF NEW YORK.

QUANTITIES AND COSTS OF MATERIAL AND LABOR - WATER GAS MANUFACTURE.

YEAR ENDED DECEMBER 31, 1923.

	QUANTITY		UNIT PRICE		AMOUNT	COST PER M.C.F. MADE	MATERIAL FOR M.C.F. MADE	
COST OF PRODUCTION - WATER GAS:								
Generator Fuel - Coal	104,731.67	G.T.	$10.664	G.T.	$1,116,838.57	$.1139	23.93	lbs.
Coke	39,283.41	G.T.	9.966	G.T.	391,506.51	.0399	8.98	lbs.
Boiler Fuel- Coal	16,828.72	G.T.	10.650	G.T.	179,233.03	.0183	3.84	lbs.
Coke	10,455.52	G.T.	6.334	G.T.	66,226.30	.0068	2.39	lbs.
Water Gas Tar	5,568,027.	Gals	.048	Gal.	266,428.51	.0272	.57	Gal.
Labor, Cartage, etc. handling					144,364.69	.0147		
Total Water Gas Fuel					$2,164,597.61	.2208		
Gas Oil	36,264,892	Gals.	.055	Gal.	2,000,021.80	.2040	3.70	Gals.
Water	23,110,040	C.F.	.001	C.F.	23,110.04	.0023	2.36	C.F.
Iron Mass	94,020	Bu.	.213	Bu.	19,979.94	.0020	.01	Bu.
Shavings	42,010	Bu.	.045	Bu.	1,871.93	.0002	---	
Sundry Supplies					8,968.00	.0009		
Labor, Cartage, etc., Handling spent material					51,556.00	.0053		
Total Material					$4,270,105.32	.4355		
Deduct: Residuals								
Water Gas Tar produced	6,211,056	Gals.	.048	Gal.	296,558.52	.0302	.63	Gal.
Drip Oil produced	276,349	Gals.	.060	Gal.	16,700.95	.0017	.03	Gal.
Total Residuals					313,259.47	.0319		
Residual Expense					8,062.57	.0008		
Net Credit from Residuals					305,196.90	.0311		
Net Material					3,964,908.42	.4044		
Gas Making Labor					375,139.60	.0383		
Total Material and Labor					4,340.048.02	.4427		
Repairs					433,023.64	.0442		
Miscellaneous Works Expense					104,057.94	.0106		
Total Cost of Water Gas Made	9,804,127,000	C.F.			4,877,129.60	.4975		

CONSOLIDATED GAS COMPANY OF NEW YORK

COST OF PRODUCTION

YEAR ENDED DECEMBER 31, 1923.

	CUBIC FEET	AMOUNT	COST PER M.C.F.
Total Cost of Water Gas Made - forward	9,804,127,000	$2,877,129.60	$.4975
Gas purchased from			
Astoria Light, Heat and Power Co.	15,017,903,700	6,921,577.78	.4609
New Amsterdam Gas Co.	314,253,400	146,937.58	.4676
Standard Gas Light Co.	87,691,400	41,991.02	.4788
	15,419,848,500	7,110,506.38	.4611
Use of Manufacturing Plant Capacity			
Astoria Light, Heat and Power Co.		2,507,258.67	
Gas Storage (Manufacturing and Storage Stations)		267,623.19	
Repairs, 14th Street and 42nd Street Reserve Plants (Coal Gas)		9,574.36	
Total Cost of Production	25,223,975,500	14,772,092.20	.5856
Increase in stock on hand	4,620,000		
Used by Company	75,447,600		
Gas Sales to Consumers	24,057,694,200		
	24,137,761,800		
Losses due to condensation, etc.	1,086,213,700	4.31%	
	25,223,975,500		

CONSOLIDATED GAS COMPANY OF NEW YORK

COST OF PRODUCTION AND DISTRIBUTION.

YEAR ENDED DECEMBER 31, 1923.

	AMOUNT	COST PER M.F.C. SOLD
Total Cost of Production - forward	$14,772,092.20	$.6140
COST OF DISTRIBUTION AND OTHER EXPENSES:		
Distribution Superintendence and Supplies and Expenses	609,138.81	.0253
Gas Meter and Installation Work	498,615.90	.0207
Work on Consumers Premises, Miscellaneous	626,628.92	.0260
Work on Consumers Premises, Gas Supply Inspection	100,101.06	.0042
Repairs of Gas Mains	187,263.59	.0078
Repairs of Gas Services	159,168.27	.0066
Repairs of Gas Meters	541,029.56	.0225
Repairs of Gas Distribution Tools	42,709.84	.0018
Repairs of Gas Appliances	252,046.39	.0105
Repairs of Buildings	30,139.75	.0013
Repairs of Street Lamps	1,317.18	.0001
Commercial Expenses	1,671,811.72	.0695
Salaries - General Office	508,642.11	.0211
Supplies and Expenses - General Office	301,154.11	.0125
General Law Expense	49,679.10	.0021
Claims and Arrears Expense	27,632.06	.0011
Claims for Damages	6,264.57	.0003
Insurance	158,546.42	.0066
Vacations and Sickness	143,974.04	.0060
Contributions to Employees Mutual Aid Society	85,165.82	.0035
Superannuation	158,968.18	.0066
Stable and Automobile Expense	288,613.11	.0120
Miscellaneous General Expense	176,061.06	.0073
Undistributed adjustments	134,658.60	.0056
Duplicate Gas Charges	84,122.70	.0035
Uncollectible Bills	110,734.41	.0046
Interest on Consumers Deposits	94,032.42	.0039
Use of Distributing System	474,535.49	.0197
Expense re Gas Rate Appeal No. 3	86,458.06	.0036
Expense re P. S. C. Hearings	113.56	-
Repairs, Insurance, etc. re property rented to others	547.77	-
Total Cost of Distribution and other Expenses	7,172,211.18	.2981
Retirement Expense (24,057,694,200 C.F. of gas sold @ 3-1/2¢ per M. C. F.)	842,019.30	.0350
Taxes	1,824,209.33	.0758
Interest on Unpaid Taxes	115,042.57	.0048
Total Cost of Production, Distribution, etc.	24,725,574.58	1.0277
Deduct: Miscellaneous Operating Revenues:		
Gross Profit from Sale of Gas Appliances, etc.	350,133.90	
Rent of Gas Appliances	1,547,152.89	
Interest on Bank Balances, etc.	58,638.74	
Rentals of Jointly used Facilities(Less 8% return on Investment)	64,469.57	
Miscellaneous Rent Revenues	75,865.12	
	2,096,260.22	.0871
Net Operating Expenses	22,629,314.36	.9406

NOTE: The sales of gas for the year ended December 31, 1923 amounted to 24, 057,694,200 C. F. and the revenue therefrom, excluding the amount carried in Suspense, amounted to $25,968,078.77, or an average of $1.079 per M. C. F.

The rates in effect were as follows:

Lighting Municipal Buildings
75¢ per M. C. F. (130,388,700 C.F.)

Commercial Metered Lighting and Prepaid Gas
Block rates with maximum of $1.15 per M. C. F.

The amount billed to consumers in excess of $1.00 per M. C. F. for gas consumed subsequent to June 1, 1923 was credited to a Suspense account and the balance therein at December 31, 1923, was $1,525,016.48.

U. S. Government Taxes:		
Capital Stock, folio 9	216,493.00	
Less amount not applicable to Gas Business	147,106.99	
		69,386.01
Federal Income:		
Estimated tax per books	500,000.00	
Less adjustment on books in 1924 to conform to tax as finally determined	104,094.88	
		395,905.12
Total taxes applicable to Gas Business		1,824,209.33
Total taxes not applicable to Gas Business		484,740.52
		2,308,949.85

Reconciliation with Books

Taxes	2,241,899.75	
Miscellaneous Operating Revenue Deductions—Taxes	92,815.94	
Non-Operating Revenue Deductions—Taxes	413,905.72	
		2,748,621.41
Less:		
Adjustment of Federal Income Tax in 1924	104,094.88	
Adjustment of Excess Dividend Tax in 1924	307.65	
Cancellation of Real Estate of Corporations' Taxes in 1924	335,269.03	
		439,671.56
		2,308,949.85

[fol. 3338] NOTE.—In addition to the foregoing amount of taxes applicable to the gas business ($1,824,209.33), there are included in the charges by the affiliated companies against the Consolidated Gas Co., the following amounts for taxes:

Included in Purchased Gas	34,607.89
Included in Use of Manufacturing Plant Capacity	515,874.32
Included in Use of Distributing System	99,348.88
	649,831.09

[fol. 3339] Consolidated Gas Company of New York

Statement Showing Distribution of New York State Gross Earnings Tax Based upon Gross Earnings for the Year Ended October 31, 1923

	Applicable to gas business	Not applicable to gas business
Gas Sales less Uncollectible Bills and allowances	26,558,858.10	.....
Bond Income	.....	260,249.45
Interest on Loans and Investments	.....	734,489.88
Dividends Received	.....	12,784,799.50
Gas Appliance Rents	1,691,960.50	.....
Gas Merchandise Revenue	351,345.43	.....
Miscellaneous Rent Revenue	*82,183.09	425,296.04
Joint Gas Rent Revenue	*120,632.13	275,701.86
Insurance Fund Income	.....	196.67
Interest on N. Y. City Corporate Stock	.....	127.50
Interest on Bank Balances	56,353.68	.....
Wharfage	1,989.25	.....
Interest on Fire Insurance Participation Certificates	.....	24,516.19
Interest on Consumers' Final Bills	83.69	.....
Interest on deferred payments (Armbro Stores and Garage Corp'n)	.....	41.73
Interest on Unpaid Oil Bills (N. Y. and Richmond Gas Co.)	.....	901.70
Interest on deferred payments—Common stock subscriptions	.....	2,217.72
Interest on award for land and improvements at 14th Street station	.....	336,234.49
Penalty for non-fulfillment of contract to deliver coal in 1920	2,250.00	.....
Residuals Sold	53,971.25	.....
Miscellaneous Revenue	.....	66.40
	28,919,628.02	14,844,839.13
	14,844,839.13	
Total Gross Income used as basis for tax	43,764,467.15	

*The Company, in distributing the Gross Earnings tax, treated those items as being wholly applicable to Gas Operations.

Distribution of Tax

Applicable to Gas Business....	$28,919,628.02	6/7 of 1%	144,598.14
Not applicable to Gas Business	14,844,889.13	6/7 of 1%	74,224.20
			218,822.34

[fol. 3340] **Consolidated Gas Company of New York**

Statement Showing Distribution of New York State Excess Dividends Tax Based upon Dividends Paid in Excess of 4% During the Year Ended October 31, 1923

Amount of Dividends paid, year ended October 31, 1923....	14,158,921.40
Dividends @ 4% per annum on average amount of Capital Stock outstanding ($150,107,475.00) year ended October 31, 1923.....	6,004,299.00
Dividends paid in excess of 4%.....	8,154,622.40
Tax—3% on Excess.....	244,638.67

Basis for Distribution of Tax by Company

		Applicable to gas business	Not applicable to gas business
Gas Sales (net).....		26,671,885.08	.....
Miscellaneous Operating Revenue.....		2,725,562.94	.....
Non-operating Revenue.....		.....	324,611.52
Dividends received.....		.....	12,784,709.50
Profit and loss entries, net credit.....		43,732.67	2,320,193.48
Total credits, year ended October 31, 1923		29,441,280.69	15,629,514.50
Deduct:			
Cost of Production.....		15,300,041.56	.....
Cost to Distribute.....		7,283,304.80	.....
Renewals and Replacements.....		844,077.86	.....
Taxes		2,031,558.72	.....
Interest on Unpaid Taxes.....		115,298.79	.....
Interest on Consumers' Deposits.....		103,568.81	.....
Interest on Bonds, Loans, etc.....		.....	571,328.46
Total debits, year ended October 31, 1923		25,687,350.54	571,328.46
Total net credit.....	18,812,036.19	3,753,850.15	15,058,186.04
	100%	19.95%	80.05%

Distribution of Tax*

Applicable to Gas Business.....	19.95% of	244,638.67	48,805.41
Not applicable to Gas Business....	80.05%	244,638.67	195,833.26
			244,638.67

*The Company distributed the tax as originally computed ($244,946.32) on above basis. The tax as above shown is the amount paid and the difference of $307.65 is adjusted on the books in 1924.

[fol. 3341] Consolidated Gas Company of New York

Real Estate Taxes Applicable to the Gas Business, Year Ended December 31, 1923

Borough of Manhattan:

Block	Lot		
239	1)	Branch No. 1, Meter Shop and Street Dep't, Hester and Elizabeth Streets	3,425 00
			1,370 00
239	5)		1,233 00
239	7)		113,710 00
368	1)		43,840 00
369	1)		164 40
369	10)		
369	11)	11th Street Manufacturing Station, Ave. D, 11th Street to 13th Street	27 40
			205 50
369	12)		109 60
369	13)		1,370 00
369	14)		1,315 20
369	15)		47,402 00
382	22)		
870	47)	General Office Building, 15th Street and Irving Place	*29,683 84
870	60)		
951	35	Stable—20th Street between Ave. A and 1st Ave.	1,644 00
952	7	Storage Holders—20th and 21st Streets between Ave. A and 1st Ave.	13,700 00
952	25	Governor House—21st Street and Ave. A	1,561 80
952	29)	Storage—20th Street and Ave A	301 40
952	30)		849 40
953	1	Central Garage and Holders—21st to 22nd Streets, Ave. A to 1st Ave.	23,975 00
			643 90
978	5)		

*38.20% of total tax (61.80% rented).

Block	Lot		
978	6)	21st Street Manufacturing Station, Ave. A, 20th to 22nd Streets	24,495 60
979	1)		54,800 00
979	27)		191 80
987	37	Oil Tanks and Storage—Ave. B, 20th to 21st Streets	5,123 80
		Forward	371,142 64
[fol. 3342]		Brought forward	371,142 64
		Borough of Manhattan—Continued:	
982	13)		10,521 60
988	1)	14th Street Manufacturing Station, Avenues C & D, 14th to 15th Streets	42,264 50
991	1)		4,959 40
991	47)		1,835 80
989	1	Holder Station—Ave. C, 15th to 16th Streets	13,467 10
985	7)		5,343 00
985	19)	Storage Yard—17th to 18th Streets between Aves. B and C	191 80
985	20)		191 80
1028	38	Branch No. 4—212 W. 57th Street	19,180 00
1089	1)	42nd Street Manufacturing Station, 11th Ave., 41st to 42nd Streets	75,350 00
1107	7)		11,919 00
1090	23)		2,877 00
1092	16)	Holder Station—45th Street West of 11th Ave.	11,097 00
1093	9)		11,782 00
1157	1	Holder Station—65th Street, Amsterdam Ave. to West End Ave.	45,210 00
1177	21	Meter Shop and Street Dep't.—66th Street West of West End Ave.	9,727 00
1457	6	Holder Station—62nd to 63rd Streets East of 1st Ave.	19,728 00

Block	Lot		
1642	33	Branch No. 6—2084 3rd Ave. cor. 114th Street	2,603 00
1670	1)	99th Street Manufacturing Station, 98th to 99th Streets, 2nd Ave. to Marginal Street	32,934 80
1692	1)		6,713 00
1682	8)	Holder Station—1st Ave., 110th to 111th Streets	274 00
1682	11)		26,509 50
1683	18	Street Dep't, Shop and Pipe Storage—111th Street and 1st Ave.	2,219 40
1704	5	Stable Garage and Coke Storage Plant—110th to 111th Streets East of 1st Ave.	11,288 80
1712	2	Dock and Coke Conveyor—110th to 111th Streets and East River	1,438 50
		Forward	740,768 64
[fol. 3343]		Brought forward	740,768 64
		Borough of Manhattan—Concluded:	
1998	16)		*71 32
1998	50)		1,507 00
1998	53)		191 80
1998	54)	Holder Station—West 132nd Street near 12th Ave.	191 80
1998	55)		191 80
1998	56)		191 80
1999	1)		24,112 00
2108	23	Meter Shop—474 West 159th Street	1,616 60
		Borough of the Bronx:	
2497	132	Land for Garage and Auto Repair Shop—153rd Street and Cromwell Ave. to E. 157th Street and Exterior Street	1,918 00

*50/365 of tax ($520.60) property purchased Nov. 12, 1923

3236	1	Kingsbridge Holder Station—Sedgwick Ave. and Fordham Road	30,194 80
			800,955 56
		Less: Assessments for local improvement included in tax rate and capitalized by Company	742 35
		Total Real Estate taxes applicable to Gas Business	800,213 21

[fol. 3344] Consolidated Gas Company of New York

Real Estate of Corporations Taxes, Year Ended December 31, 1923

Consolidated Gas Co.:	
Borough of Manhattan	1,109 70
Borough of the Bronx	246 60
	1,356 30
Less assessments for local improvements included in tax rate and capitalized by Company	1 54
	1,354 76

NOTE.—The following 1923 Real Estate of Corporations Taxes were cancelled in 1924:

Harlem Gas Light Co.: Borough of Manhattan	44,525 00
Knickerbocker Gas Light Co.: Borough of Manhattan	54,800 00
Manhattan Gas Light Co.: Borough of Manhattan	71,240 00
Metropolitan Gas Light Co.: Borough of Manhattan	58,910 00
Municipal Gas Light Co.:	
Borough of Manhattan	47,265 00
Borough of the Bronx	4,110 00
N. Y. Gas Light Co.: Borough of Manhattan	54,800 00
	335,650 00

Less assessments for local improvements included in tax rate and capitalized by Company	380 97
Total charged to 1923 operations and credited to Profit and Loss in 1924	335,269 03

[fol. 3345] Consolidated Gas Company of New York

Special Franchise Taxes, Year Ended December 31, 1923

Consolidated Gas Company:

Borough of Manhattan	332,928 40
Borough of the Bronx	31,431 84
	364,360 24
Less assessments for local improvements included in tax rate and capitalized by Company	413 56
	363,946 68

[fol. 3346] Consolidated Gas Company of New York

Statement Showing Distribution of Federal Capital Stock Tax

"Fair Value" of Capital Stock (less $5,000.00 exemption based upon Balance Sheet of December 31, 1922 (per tax return to U. S. Government	216,493,155.16
Tax—$1.00 per $1,000.00 of "Fair Value"	216,493.00

Basis for Distribution of Tax by Company

Assets Per Balance Sheet December 31, 1922 (Contras Eliminated)

		Applicable to gas business	Not applicable to gas business
Fixed Assets		65,675,820.13	.....
Material and Supplies		1,576,551.18	.....
Securities owned		.....	152,811,609.98
Loans Receivable		.....	6,695,500.00
Accrued Interest Receivable		.....	95,124.68
Cash		*4,332,266.83	.....
Accounts Receivable (Sundry Consumers, Sundry Debtors, etc.)		2,762,479.00	.....
Employees Fund Investment		85,882.11	.....
Items of Suspense		867,677.61	.....
Total	234,902,911.52	75,300,676.86	159,602,234.66
	100%	32.05%	67.95%

*After deducting $4,583,220.00 as offset, in part, to loans from Affiliated Companies aggregating $18,300,000.00 paid Jan. 2, 1923.

PLAINTIFF'S EXHIBIT NO. 818

CONSOLIDATED GAS COMPANY OF NEW YORK

Summaries of

Purchased Gas

Use of Manufacturing Plant Capacity

Use of Distributing System

Year ended December 31, 1923

to accompany

Statement of Cost of Production and Distribution

Year ended December 31, 1923

PATTERSON, TEELE AND DENNIS,

ACCOUNTANTS AND AUDITORS.

NEW YORK, BOSTON, BALTIMORE AND WASHINGTON

3347

#9859

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CONSOLIDATED GAS COMPANY OF NEW YORK

SUMMARY OF PURCHASED GAS

YEAR ENDED DECEMBER 31, 1923

	PURCHASED GAS			BASIS FOR CHARGE					
				"STATION COST"		GENERAL & MISC. EXPENSES		GROSS EARNINGS TAX	
	CUBIC FEET	AMOUNT	¢ PER M.C.F.	AMOUNT	¢ PER M.C.F.	AMOUNT	¢ PER M.C.F.	AMOUNT	¢ PER M.C.F.
Astoria Light, Heat & Power Co.	15,017,903,700	6921 577 76	46.09	6855 964 04	44.99	131 005 85	.87	34 607 89	.23
New Amsterdam Gas Co.	314,253,400	146 937 58	46.76	146 937 58	46.76				
Standard Gas Light Co.	87,691,400	41 991 02	47.88	41 991 02	47.88				
	15,419,848,500	7110 506 39	46.11	6944 392 64		131 005 85		34 607 89	

CONSOLIDATED GAS COMPANY OF NEW YORK

SUMMARY OF USE OF MANUFACTURING PLANT CAPACITY

YEAR ENDED DECEMBER 31, 1923

	INVESTMENT	CARRYING CHARGES				
		TOTAL		RETURN ON INVESTMENT 8%	TAXES 2-1/2%	RENEWALS & REPLACEMENTS & INSURANCE 1/2%
		RATE PER ANNUM	AMOUNT			
Astoria Light, Heat and Power Co.						
Plant, Holders and Accessories	17 623 929 28	11%	1 939 632 22	1 409 914 34	440 598 23	88 119 65
Land	3 011 043 74	10-1/2%	316 159 59	240 883 50	75 276 09	
Working Capital	3 156 836 71	8%	252 466 86	252 466 86		
Total Use of Manufacturing Plant Capacity			2 507 258 67	1 903 264 70	515 874 32	88 119 65

CONSOLIDATED GAS COMPANY OF NEW YORK

SUMMARY OF USE OF DISTRIBUTING SYSTEM

YEAR ENDED DECEMBER 31, 1923

	INVESTMENT	CARRYING CHARGES: TOTAL RATE PER ANNUM	TOTAL AMOUNT	RETURN ON INVESTMENT 6%	TAXES 2-1/2%	MAINTENANCE 1%	RENEWALS & REPLACEMENTS & INSURANCE 1/2%
East River Gas Co. of L. I. City							
Astoria Tunnel	2922 276 98	12%	350 673 12	233 782 08	73 056 90	29 222 76	14 611 38
Ravenswood Tunnel	392 121 31	12%	47 414 56	31 609 71	9 878 03	3 951 21	1 975 61
48" and 60" Mains on Long Island	477 841 65	12%	57 316 92	38 211 28	11 941 03	4 776 41	2 388 20
			455 404 60	303 603 07	94 875 96	37 950 38	18 975 19
Standard Gas Light Co.							
48" Harlem River Main	111 712 95	12%	13 405 54	8 937 03	2 792 83	1 117 13	558 56
62nd St. Governor and Valve House							
Plant	53 528 55	11%	5 888 14	4 282 29	1 338 21		267 64
Land	13 676 34	10-1/2%	1 436 90	1 094 02	341 88		
Leasehold	8 239 25	8%	659 14	659 14			
			21 388 73	14 972 48	4 472 92	1 117 13	826 20
			476 793 33	318 575 55	99 348 88	39 067 51	19 801 39
Deduct : Allowance by East River Gas Co. for Consolidated Gas Company's proportion of rental received from Electric Companies for use of cable space in Astoria Tunnel			2 257 84				
Total Use of Distributing System			476 535 49				3350

PLAINTIFF'S EXHIBIT NO. 820

SCHEDULE AA

CONSOLIDATED GAS COMPANY OF NEW YORK
DETAILED STATEMENT OF THE COST OF THE COMPANY'S REAL ESTATE, INCLUDING IMPROVEMENTS THEREON OTHER THAN MANUFACTURING PLANT AND HOLDER STATIONS, TO AND INCLUDING DECEMBER 31, 1923

CONSOLIDATED GAS COMPANY OF NEW YORK - BOOK VALUE REAL ESTATE

	11th St.Sta.	14th St.Sta.	15th St.Sta.	17th St. yd.	18th St.Sta.	21st St.Sta.	42nd St.Sta.	W.42nd St. Murray Prop.	44th St.Sta.
Nov.11,1884		$1,940,000.00			$2,048,000.00	$1,857,000.00	$907,000.00		$1,089,000.00
1885					4,532.00				
Dec.31,1885		$1,940,000.00			$2,052,532.00	$1,857,000.00	$907,000.00		$1,089,000.00
1886									
Dec.31,1886		$1,940,000.00			$2,052,532.00	$1,857,000.00	$907,000.00		$1,089,000.00
1887					72.00				
Dec.31,1887		$1,940,000.00			$2,052,604.00	$1,857,000.00	$907,000.00		$1,089,000.00
1888						11,019.80			8,000.00
Dec.31,1888		$1,940,000.00			$2,052,604.00	$1,868,019.80	$907,000.00		$1,097,000.00
1889									
Dec.31,1889		$1,940,000.00			$2,052,604.00	$1,868,019.80	$907,000.00		$1,097,000.00
1890									
Dec.31,1890		$1,940,000.00			$2,052,604.00	$1,868,019.80	$907,000.00		$1,097,000.00
1891					489.75				24,900.00
Dec.31,1891		$1,940,000.00			$2,053,093.75	$1,868,019.80	$907,000.00		$1,121,900.00
1892									13,600.00
Dec.31,1892		$1,940,000.00			$2,053,093.75	$1,868,019.80	$907,000.00		$1,135,500.00
1893									
Dec.31,1893		$1,940,000.00			$2,053,093.75	$1,868,019.80	$907,000.00		$1,135,500.00
1894									
Dec.31,1894		$1,940,000.00			$2,053,093.75	$1,868,019.80	$907,000.00		$1,135,500.00
1895									
Dec.31,1895		$1,940,000.00			$2,053,093.75	$1,868,019.80	$907,000.00		$1,135,500.00
1896									
Dec.31,1896		$1,940,000.00			$2,053,093.75	$1,868,019.80	$907,000.00		$1,135,500.00
1897									
Dec.31,1897		$1,940,000.00			$2,053,093.75	$1,868,019.80	$907,000.00		$1,135,500.00
1898								$60,588.65	
Dec.31,1898		$1,940,000.00			$2,053,093.75	$1,868,019.80	$907,000.00	$60,588.65	$1,135,500.00
1899						72,662.73			
Dec.31,1899		$1,940,000.00			$2,053,093.75	$1,940,682.53	$907,000.00	$60,588.65	$1,135,500.00
1900						6.00			
Dec.31,1900		$1,940,000.00			$2,053,093.75	$1,940,688.53	$907,000.00	$60,588.65	$1,135,500.00
1901								10,000.00	
Dec.31,1901		$1,904,000.00			$2,053,093.75	$1,940,688.53	$907,000.00	$50,588.65	$1,135,500.00
1902						10,000.00			
Dec.31,1902		$1,940,000.00			$2,053,093.75	$1,950,688.53	$907,000.00	$50,588.65	$1,135,500.00
1903						247,229.43			
Dec.31,1903		$1,940,000.00			$2,053,093.75	$1,703,459.10	$907,000.00	$50,588.65	$1,135,500.00
1904		47.19			99.15	42.54			859.19
Dec.31,1904		$1,940,047.19			$2,053,192.90	$1,703,501.94	$907,000.00	$50,588.65	$1,136,359.19
1905		179,971.00				1,037.60	500.00		268.34
Dec.31,1905		$1,760,076.19			$2,053,192.90	$1,704,539.54	$907,500.00	$50,588.65	$1,136,627.53

CONSOLIDATED GAS COMPANY OF NEW YORK - BOOK VALUE OF REAL ESTATE

	11th st.sta.	14th st.sta.	15th st.sta.	17th St.Yd.	18th St.Sta.	21st St.Sta.	42nd St.Sta.	W. 42nd St. Murray Prop.	44th St.sta.
Dec. 31, 1905		$1,760,076.19			$2,053,192.90	$1,704,539.54	$907,500.00	$50,589.65	$1,136,627.53
1906						490.50	20.00		
Dec. 31, 1906		1,760,076.19			2,053,192.90	1,705,030.04	907,520.00	50,588.65	1,136,627.53
1907		20.28			202.99	12,081.15			
Dec. 31, 1907		1,760,096.47			2,053,395.89	1,717,111.19	907,520.00	50,588.65	1,136,627.53
1908		265.62				98.00			
Dec. 31, 1908		1,760,362.09			2,053,395.89	1,717,209.19	907,520.00	50,588.65	1,136,627.53
1909						836.47			
Dec. 31, 1909		1,760,362.09			2,053,395.89	1,718,045.66	907,520.00	50,588.65	1,136,627.53
1910		260.94			(253,695.94)	1,931.81		(50,588.65)	
Dec. 31, 1910		1,760,643.03			1,799,701.95	1,719,977.47	907,520.00		1,136,627.53
1911		181.64				1,099.01			1,342.83
Dec. 31, 1911		1,760,824.67			1,799,701.95	1,721,076.48	907,520.00		1,137,970.36
1912						105.74			
Dec. 31, 1912		1,760,824.67			1,799,701.95	1,721,182.22	907,520.00		1,137,970.36
1913					(937,965.13)	(1,960.24)			
Dec. 31, 1913		1,760,824.67			861,736.82	1,719,221.98	907,520.00		1,137,970.36
1914									
Dec. 31, 1914		1,760,824.67			861,736.82	1,719,221.98	907,520.00		1,137,970.36
1915					1,307.83	319.99			
Dec. 31, 1915		1,760,824.67			863,044.65	1,719,541.97	907,520.00		1,137,970.36
1916					(235,325.10)	(245.38)			
Dec. 31, 1916		1,760,824.67			627,719.55	1,719,296.59	907,520.00		1,137,970.36
1917					(367,247.00)		(48,520.00)		
Dec. 31, 1917		1,760,824.67			260,472.55	1,719,296.59	859,000.00		1,137,970.36
1918		20,645.84							
Dec. 31, 1918		1,781,470.51			260,472.55	1,719,296.59	859,000.00		1,137,970.36
1919					(60,000.00)				(27,800.00)
Dec. 31, 1919		1,781,470.51			200,472.55	1,719,296.59	859,000.00		1,110,170.36
1920		(12,000.00)							
Dec. 31, 1920		1,769,470.51			200,472.55	1,719,296.59	859,000.00		1,110,170.36
1921						587.08			
31, 1921		1,769,470.51			200,472.55	1,719,883.67	859,000.00		1,110,170.36
Jan-June 1922									
June 30, 1922		1,769,470.51			200,472.55	1,719,883.67	859,000.00		1,110,170.36
July-Dec.1922	$1,763,535.67				(125,472.55)				(22,894.89)
Dec. 31, 1928	$1,763,535.67	1,769,470.51			75,000.00	1,719,883.67	859,000.00		1,087,275.47
Jan-May 1923					(7,500.00)				(41,916.09)
June 1, 1923	1,763,535.67	1,769,470.51			67,500.00	1,719,883.67	859,000.00		1,045,359.38
June-Dec.1923		(1,769,470.51)	$168,585.84	$168,531.77		3,304.21	(799,000.00)		
Dec. 31, 1923	$1,763,535.67	-o-	$168,585.84	$168,531.77	$67,500.00	$1,723,187.88	$60,000.00		$1,045,359.38

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CONSOLIDATED GAS COMPANY OF NEW YORK - BOOK VALUE OF REAL ESTATE

	63rd St.Sta.	65th St.Sta.	99th St.Sta.	111th St.Sta.	132nd St.Sta.	Inwood Sta.	Kingsbridge Station	Hester & Elizabeth St.
Nov.11,1884	$223,750.00	$320,000.00	$595,000.00	$676,000.00		$28,000.00		$100,000.00
1885								
Dec.31,1885	$223,750.00	$320,000.00	$595,000.00	$676,000.00		$28,000.00		$100,000.00
1886								
Dec.31,1886	$223,750.00	$320,000.00	$595,000.00	$676,000.00		$28,000.00		$100,000.00
1887								
Dec.31,1887	$223,750.00	$320,000.00	$595,000.00	$676,000.00		$28,000.00		$100,000.00
1888								
Dec.31,1888	$223,750.00	$320,000.00	$595,000.00	$676,000.00		$28,000.00		$100,000.00
1889	4,650.00							
Dec.31,1889	$228,400.00	$320,000.00	$595,000.00	$676,000.00		$28,000.00		$100,000.00
1890				7,000.00				
Dec.31,1890	$228,400.00	$320,000.00	$595,000.00	$683,000.00		$28,000.00		$100,000.00
1891		100.70						
Dec.31,1891	$228,400.00	$320,100.70	$595,000.00	$683,000.00		$28,000.00		$100,000.00
1892					$235,000.00			
Dec.31,1892	$228,400.00	$320,100.70	$595,000.00	$683,000.00	$235,000.00	$28,000.00		$100,000.00
1893			456.51					800.00
Dec.31,1893	$228,400.00	$320,100.70	$595,456.51	$683,000.00	$235,000.00	$28,000.00		$100,800.00
1894								81.00
Dec.31,1894	$228,400.00	$320,100.70	$595,456.51	$683,000.00	$235,000.00	$28,000.00		$100,881.00
1895								
Dec.31,1895	$228,400.00	$320,100.70	$595,456.51	$683,000.00	$235,000.00	$28,000.00		$100,881.00
1896								
Dec.31,1896	$228,400.00	$320,100.70	$595,456.51	$683,000.00	$235,000.00	$28,000.00		$100,881.00
1897			27,500.00			225.12		
Dec.31,1897	$228,400.00	$320,100.70	$622,956.51	$683,000.00	$235,000.00	$27,774.88		$100,881.00
1898			8,250.00					
Dec.31,1898	$228,400.00	$320,100.70	$631,206.51	$683,000.00	$265,000.00	$27,774.88		$100,881.00
1899				140.00				
Dec.31,1899	$228,400.00	$320,100.70	$631,206.51	$683,140.00	$235,000.00	$27,774.88		$100,881.00
1900				119,040.00				
Dec.31,1900	$228,400.00	$320,100.70	$631,206.51	$564,100.00	$235,000.00	$27,774.88		$100,881.00
1901								
Dec.31,1901	$228,400.00	$320,100.70	$631,206.51	$564,100.00	$235,000.00	$27,774.88		$100,881.00
1902								
Dec.31,1902	$228,400.00	$320,100.70	$631,206.51	$564,100.00	$235,000.00	$27,774.88		$100,881.00
1903								790.00
Dec.31,1903	$228,400.00	$320,100.70	$631,206.51	$564,100.00	$235,000.00	$27,774.88		$101,671.00
1904	35.43							
Dec.31,1904	$228,435.43	$320,100.70	$631,206.51	$564,100.00	$235,000.00	$27,774.88		$101,671.00
1905	178,078.00			250.00				
Dec.31,1905	$ 50,357.43	$320,100.70	$631,206.51	$564,350.00	$235,000.00	$27,774.88		$101,671.00

CONSOLIDATED GAS COMPANY OF NEW YORK - BOOK VALUE OF REAL ESTATE

	63rd St. Sta.	65th St. Sta.	99th St. Sta.	111th St. Sta.	132nd St. Sta.	Inwood Station	Kingsbridge Station	Hester and Elizabeth Sts.
Dec. 31, 1905	$50,357.43	$320,100.70	$631,206.51	$564,350.00	$235,000.00	$27,774.88		$101,671.00
1906			10.00	10.00	(28,567.50)			511.70
Dec. 31, 1906	$50,357.43	$320,100.70	$631,216.51	$564,360.00	$206,432.50	$27,774.88		$102,182.70
1907					8.51			19,204.62
Dec. 31, 1907	$50,357.43	$320,100.70	$631,216.51	$564,360.00	$206,441.01	$27,774.88		$121,387.32
1908	1,033.54			12,230.54	26.37			
Dec. 31, 1908	$51,390.97	$320,100.70	$631,216.51	$576,590.54	$206,467.38	$27,774.88		$121,387.32
1909		1,635.02		2,513.84	730.34			298.79
Dec. 31, 1909	$51,390.97	$321,735.72	$631,216.51	$579,104.38	$207,197.72	$27,774.88		$121,686.11
1910		(1,399.28)	92.86	835.63	74.20		$263,972.20	1,355.26
Dec. 31, 1910	$51,390.97	$320,336.44	$631,309.37	$579,940.01	$207,271.92	$27,774.88	$283,972.20	$123,041.37
1911							63.50	
Dec. 31, 1911	$51,390.97	$320,336.44	$631,309.37	$579,940.01	$207,271.92	$27,774.88	$284,035.70	$123,041.37
1912				(45,092.07)			(9,912.98)	
Dec. 31, 1912	$51,390.97	$320,336.44	$631,309.37	$534,847.94	$207,271.92	$27,774.88	$274,122.72	$123,041.37
1913		777.81		301.16			8,571.92	194.74
Dec. 31, 1913	$51,390.97	$321,114.25	$631,309.37	$535,149.10	$207,271.92	$27,774.88	$282,694.64	$123,236.11
1914					50,000.00		481.00	449.91
Dec. 31, 1914	$51,390.97	$321,114.25	$631,309.37	$535,149.10	$257,271.92	$27,774.88	$283,175.64	$123,686.02
1915							83.72	(96.99)
Dec. 31, 1915	$51,390.97	$321,114.25	$631,309.37	$535,149.10	$257,271.92	$ 27,774.88	$283,259.36	$123,589.03
1916							(13,735.98)	226.80
Dec. 31, 1916	$51,390.97	$321,114.25	$631,309.37	$535,149.10	$257,271.92	$27,774.88	$269,523.38	$123,915.83
1917					(146,320.75)		8.19	
Dec. 31, 1917	$51,390.97	$321,114.25	$631,309.37	$535,149.10	$110,951.17	$27,774.88	$269,531.57	$123,815.83
1918								450.00
Dec. 31, 1918	$51,390.97	$321,114.25	$631,309.37	$535,149.10	$110,951.17	$27,774.88	$269,531.57	$124,265.83
1919								
Dec. 31, 1919	$51,390.97	$321,114.25	$631,309.37	$535,149.10	$110,951.17	$27,774.88	$269,531.57	$124,265.83
1920								205.39
Dec. 31, 1920	$51,390.97	$321,114.25	$631,309.37	$535,149.10	$110,951.17	$27,774.88	$269,531.57	$124,471.22
1921						(6,007.98)		66,844.49
Dec. 31, 1921	$51,390.97	$321,114.25	$631,309.37	$535,149.10	$110,951.17	$21,766.90	$269,531.57	$191,315.71
Jan. - June 1922								14,375.98
June 30, 1922	$51,390.97	$321,114.25	$631,309.37	$535,149.10	$110,951.17	$21,766.90	$269,531.57	$205,691.69
July - Dec. 1922		27.92						49,970.10
Dec. 31, 1922	$51,390.97	$321,142.17	$631,309.37	$535,149.10	$110,951.17	$21,766.90	$269,531.57	$255,661.79
Jan. - May 1923		942.18						939.64
June 1, 1923	$51,390.97	$322,084.35	$631,309.37	$535,149.10	$110,951.17	$21,766.90	$269,531.57	$256,601.43
June - Dec. 1923				1,064.49	27,247.72			1,466.09
Dec. 31, 1923	$51,390.97	$322,084.35	$631,309.37	$536,213.59	$138,198.89	$21,766.90	$269,531.57	$258,067.52

CONSOLIDATED GAS COMPANY OF NEW YORK - BOOK VALUE OF REAL ESTATE

	130 E. 15th Street Land	130 E. 15th Street Building	212 West 57th St.	Ave. A. & 60th-61st Streets	66th St. St. Department & Shop	222-8 West 65th St.	114th Street and 3rd Ave.	116th St. & Lexington Ave.
Nov. 14, 1884	$175,000.00			$158,250.00	$115,000.00	$	$50,000.00	
1885	25,000.00							
Dec. 31, 1885	$200,000.00			$158,250.00	$115,000.00		$50,000.00	
1886								
Dec. 31, 1886	$200,000.00			$158,250.00	$115,000.00		$50,000.00	
1887	1,500.00							
Dec. 31, 1887	$201,500.00			$158,250.00	$115,000.00		$50,000.00	
1888								
Dec. 31, 1888	$201,500.00			$158,250.00	$115,000.00		$50,000.00	
1889								
Dec. 31, 1889	$201,500.00			$158,250.00	$115,000.00		$50,000.00	
1890								
Dec. 31, 1890	$201,500.00			$158,250.00	$115,000.00		$50,000.00	
1891								
Dec. 31, 1891	$201,500.00			$158,250.00	$115,000.00		$50,000.00	
1892							1,000.00	$65,000.00
Dec. 31, 1892	$201,500.00			$158,250.00	$115,000.00		$51,000.00	$65,000.00
1893							86,500.80	$
Dec. 31, 1893	$201,500.00			$158,250.00	$115,000.00		$137,500.80	$65,000.00
1894								
Dec. 31, 1894	$201,500.00			$158,250.00	$115,000.00		$137,500.80	$65,000.00
1895								
Dec. 31, 1895	$201,500.00			$158,250.00	$115,000.00		$137,500.80	$65,000.00
1896								
Dec. 31, 1896	$201,500.00			$158,250.00	$115,000.00		$137,500.80	$65,000.00
1897								
Dec. 31, 1897	$201,500.00			$158,250.00	$115,000.00		$137,500.80	$65,000.00
1898	15,000.00							
Dec. 31, 1898	$216,500.00			$158,250.00	$115,000.00		$137,500.80	$65,000.00
1899								
Dec. 31, 1899	$216,500.00			$158,250.00	$115,000.00		$137,500.80	$65,000.00
1900								
Dec. 31, 1900	$216,500.00			$158,250.00	$115,000.00		$137,500.80	$65,000.00
1901								
Dec. 31, 1901	$216,500.00			$158,250.00	$115,000.00		$137,500.80	$65,000.00
1902	14,250.00				50,485.95			
Dec. 31, 1902	$230,750.00			$158,250.00	$165,485.95		$137,500.80	$65,000.00
1903				125.00	642.92		650.47	
Dec. 31, 1903	$230,750.00			$158,375.00	$166,128.87		$136,181.27	$65,000.00
1904	1,837.39				3,227.84	60,266.75	537.04	
Dec. 31, 1904	$232,587.39			$158,375.00	$169,356.71	$ 60,266.75	$136,719.31	$65,000.00

CONSOLIDATED GAS COMPANY OF NEW YORK - BOOK VALUE OF REAL ESTATE

	130 E. 15th Street Land	130 E. 15th Street Building	212 West 57th Street	Ave. A and 60th-61st Streets	66th St. St. Department and Shop	222-8 West 65th St.	114th Street and 3rd Ave.	116th Street & Lexington Avenue
Dec. 31, 1904	$232,587.39			$158,375.00	$169,356.71	$ 60,266.75	$138,718.31	$ 65,000.00
1905	686.70				394.71	1,555.00		
Dec. 31, 1905	$233,274.09			$158,375.00	$169,751.42	$ 61,821.75	$138,718.31	$ 65,000.00
1906	434.23				174.84		401.30	
ec. 31, 1906	$233,708.32			$158,375.00	$169,926.26	$ 61,821.75	$139,119.61	$ 65,000.00
1907	288.00				110.05		44.37	
Dec. 31, 1907	$233,996.32			$158,375.00	$170,036.31	$ 61,821.75	$139,163.98	$ 65,000.00
1908	5,449.56				1,301.52	32.00	31.00	53.30
Dec. 31, 1908	$239,445.88			$158,375.00	$171,337.83	$ 61,853.75	$139,194.98	$ 65,053.30
1909	9,095.81				1,459.57			
Dec. 31, 1909	$248,541.69			$158,375.00	$172,797.40	$ 61,853.75	$139,194.98	$ 65,053.30
1910	1,024.52	$ 895.28		21.96	5,813.24	104.36	6,268.04	
Dec. 31, 1910	$249,566.21	$ 895.28		$158,396.96	$178 ,610.64	$ 61,958.11	$145,463.02	$ 65,053.30
1911	17,883.55	369,231.86			10,011.35		1,794.60	
Dec. 31, 1911	$231,682.66	$ 370,127.14		$158,396.96	$188,621.99	$ 61,958.11	$147,257.62	$ 65,053.30
1912	336,070.95	47,373.29			7,985.82		60.00	
Dec. 31, 1912	$567,753.61	$ 417,500.43		$158,396.96	$196,607.81	$ 61,958.11	$147,197.62	$ 65,053.30
1913	50,169.63	2,125,914.58			8,910.42			
Dec. 31, 1913	$517,583.98	$2,543,415.01		$158,396.96	$205,518.23	$ 61,958.11	$147,197.62	$ 65,053.30
1914	25.00	706,616.01		118.00	100.24		28.47	
Dec. 31, 1914	$517,608.98	$3,250,031.02		$158,514.96	$205,417.99	$ 61,958.11	$147,226.09	$ 65,053.30
1915	25.00	719,306.11	$401,422.25	273.59	563.12			
Dec. 31, 1915	$517,633.98	$2,531,724.91	$401,422.25	$158,788.55	$205,981.11	$ 61,958.11	$147,226.09	$ 65,053.30
1916	25.00	61,314.32	38,222.45			935.63		93.30
Dec. 31, 1916	$517,658.98	$2,593,039.23	$439,644.70	$158,788.55	$205,981.11	$ 62,893.74	$147,226.09	$ 65,146.60
1917		1,979.11	242,074.45			71,423.76	2,057.39	
Dec. 31, 1917	$517,658.98	$2,595,018.34	$681,719.15	$158,788.55	$205,981.11	$ 134,317.50	$149,283.48	$ 65,146.60
1918		6,956.94	14,421.57			97.48	872.08	
Dec. 31, 1918	$517,658.98	$2,601,975.28	$696,140.72	$158,788.55	$205,981.11	$ 134,414.98	$150,155.56	$ 65,146.60
1919		15,143.95	1,891.62	2,412.00			1,788.29	
Dec. 31, 1919	$517,658.98	$2,617,119.23	$698,032.34	$152,670.55	$205,981.11	$ 134,414.98	$151,943.85	$ 65,146.60
1920		1,371.89	1,035.81				2,192.10	
Dec. 31, 1920	$517,658.98	$2,618,491.12	$696,996.53	$152,670.55	$205,981.11	$ 134,414.98	$154,135.95	$ 65,146.60
1921		1,679.40	766.56	64,370.00			1,458.90	65,146.60
Dec. 31, 1921	$517,658.98	$2,620,170.52	$697,763.09	$ 88,300.55	$205,981.11	$ 134,414.98	$155,594.85	-o-
Jan.-June 1922		235.00					942.77	-o-
June 30, 1922	$517,658.98	$2,620,405.52	$697,763.09	$ 88,300.55	$205,981.11	$ 134,414.98	$156,537.62	-o-
July-Dec. 1922		275.00			161.31			
Dec. 31, 1922	$517,658.98	$2,620,680.52	$697,763.09	$ 88,300.55	$206,142.42	$ 134,414.98	$156,537.62	-o-
Jan.-May 1923				66,300.55	373.28			
June 1, 1923	$517,658.98	$2,620,680.52	$697,763.09	$ 22,000.00	$206,515.70	$ 134,414.98	$156,537.62	-o-
June-Dec. 1923		1,610.93			412.15			
Dec. 31, 1923	$517,658.98	$2,622,291.45	$697,763.09	$ 22,000.00	$206,927.85	$ 134,414.98	$156,537.62	-o-

CONSOLIDATED GAS COMPANY OF NEW YORK - BOOK VALUE OF REAL ESTATE

	E. 132nd St. & Locust Avenue	474 West 159th Street	166th St. & Audubon Avenue	201st St. Academy St. & Harlem River	Kent Ave. and Wallabout Canal	Shadyside, N. J.	Cromwell Ave. & 153rd Street	Hunts Point
Dec. 31, 1905	$					$432,196.22		
1906	90,000.00							
Dec. 31, 1906	$ 90,000.00					$432,196.22		
1907	436.75							
Dec. 31, 1907	$ 90,436.75					$432,196.22		
1908	295.00							
Dec. 31, 1908	$ 90,731.75					$432,196.22		
1909		$58,124.87						
Dec. 31, 1909	$ 90,731.75	$58,124.87				$432,196.22		
1910	4,996.22	27,398.78		$749,998.18				
Dec. 31, 1910	$ 95,727.97	$85,523.65		$749,998.18		($432,196.22)		
1911	6,234.54	890.51		5,664.48				
Dec. 31, 1911	$101,962.51	$86,414.26		$755,662.66				
1912		(859.12)		($755,662.66)				
Dec. 31, 1912	$101,962.51	$85,554.08						
1913		334.22						
Dec. 31, 1913	$101,962.51	$85,888.30			$75,434.00			
1914		234.59						
Dec. 31, 1914	$101,962.51	$86,122.89			$75,434.00			
1915		5.46			2,182.03			
Dec. 31, 1915	$101,962.51	$86,128.35			$77,616.03			
1916	(2,510.76)	899.86			315.15			
Dec. 31, 1916	$ 99,451.75	$87,028.21			$77,931.18			
1917								
Dec. 31, 1917	$ 99,451.75	$87,028.21			$77,931.18			
1918			$ 56,344.80					
Dec. 31, 1918	$ 99,451.75	$87,028.21	$ 56,344.80		$77,931.18			
1919								
Dec. 31, 1919	$ 99,451.75	$87,028.21	$ 56,344.80		$77,931.18			
1920								
Dec. 31, 1920	$ 99,451.75	$87,028.21	$ 56,344.80		$77,931.18			
1921								
Dec. 31, 1921	$ 99,451.75	$87,028.21	$ 56,344.80		$77,931.18			
Jan.-June 1922								
June 30, 1922	$ 99,451.75	$87,028.21	$ 56,344.80		$77,931.18			
July-Dec. 1922		272.24						
Dec. 31, 1922	$ 99,451.75	$87,300.45	$ 56,344.80		$77,931.18		$201,078.00	
Jan.-May 1923		(858.41)					$201,078.00	
June 1, 1923	$ 99,451.75	$86,442.04	$ 56,344.80		$77,931.18			$2,265,103.00
June-Dec. 1923	(99,451.75)	77.90						
Dec. 31, 1923	-0-	$86,519.94	$ 56,344.80		$77,931.18		$201,078.00	$2,265,103.00

CONSOLIDATED GAS COMPANY OF NEW YORK - BOOK VALUE OF REAL ESTATE

	Shadyside, N. J.	Assessments	Totals
Nov. 14, 1884	$ 50,000.00	$	$ 10,332,000.00
1885			29,532.00
Dec. 31, 1885	$ 50,000.00		$ 10,361,532.00
1886		12,502.38	12,502.38
Dec. 31, 1886	$ 50,000.00	$ 12,502.38	$ 10,374,034.38
1887		738.63	2,310.63
Dec. 31, 1887	$ 50,000.00	$ 13,241.01	$ 10,376,345.01
1888		8,184.16	$ 27,203.96
Dec. 31, 1888	$ 50,000.00	$ 21,425.17	$ 10,403,548.97
1889	34,450.00	1,952.60	41,052.60
Dec. 31, 1889	$ 84,450.00	$ 23,377.77	$ 10,444,601.57
1890	10,201.87	13,291.89	27,493.76
Dec. 31, 1890	$ 94,651.87	$ 33,669.66	$ 10,472,095.33
1891	32,506.07	1,233.15	59,229.67
Dec. 31, 1891	$127,157.94	$ 34,902.81	$ 10,531,325.00
1892	40,162.11	33,009.69	387,771.80
Dec. 31, 1892	$167,320.05	$ 67,912.50	$ 10,919,096.80
1893	43,509.17	24,111.43	155,377.91
Dec. 31, 1893	$210,829.22	$ 92,023.93	$ 11,074,474.71
1894	42,112.12	6,905.87	49,098.69
Dec. 31, 1894	$252,941.34	$ 98,929.50	$ 11,123,573.40
1895	30,295.62	8,631.45	38,927.07
Dec. 31, 1895	$283,236.96	$ 107,560.95	$ 11,162,500.47
1896	32,575.78	4,365.90	36,941.68
Dec. 31, 1896	$315,812.74	$ 111,926.85	$ 11,199,442.15
1897	31,876.41	5,785.40	64,936.69
Dec. 31, 1897	$347,689.15	$ 117,712.25	$ 11,264,378.84
1898	36,672.44	(1,859.66)	118,652.43
Dec. 31, 1898	$384,361.59	$ 115,853.59	$ 11,383,031.27
1899	24,643.76	1,847.26	99,293.75
Dec. 31, 1899	$409,005.35	$ 117,700.85	$ 11,482,325.02
1900	3,136.80	931.44	(114,965.76)
Dec. 31, 1900	$412,142.15	$ 118,632.29	$ 11,367,359.26
1901		418.25	(9,581.75)
Dec. 31, 1901	$412,142.15	$ 119,050.54	$ 11,357,777.51
1902		1,762.95	76,498.90
Dec. 31, 1902	$412,142.15	$120, 813.49	$ 11,434,276.41
1903	19,989.07	4,026.72	(220,975.25)
Dec. 31, 1903	$432,131.22	$ 124,840.21	$ 11,213,301.16
1904	40.00	2,701.84	69,694.66
Dec. 31, 1904	$432,171.22	$ 127,542.05	$ 11,282,995.82
1905	$ 25.00	$ 254.11	(353,077.54)
Dec. 31, 1905	$432,196.22	$ 127,796.16	$ 10,929,918.28

CONSOLIDATED GAS COMPANY OF NEW YORK - BOOK VALUE OF REAL ESTATE

	Assessments	Totals
Dec. 31, 1905	$ 127,796.16	$ 10,929,918.28
1906	11,953.71	75,438.78
Dec. 31, 1906	$ 139,749.87	$ 11,005,357.06
1907	50.82	32,447.54
Dec. 31, 1907	$ 139,800.69	$ 11,037,804.60
1908		20,816.45
Dec. 31, 1908	$ 139,800.69	$ 11,058,621.05
1909	12,943.88	87,638.59
Dec. 31, 1909	$ 152,744.57	$ 11,146,259.64
1910	2,702.86	349,888.25
Dec. 31, 1910	$ 155,447.43	$ 11,496,147.89
1911	1,258.42	379,889.29
Dec. 31, 1911	$ 156,705.85	$ 11,876,037.18
1912	4,507.37	(415,544.72)
Dec. 31, 1912	$ 161,213.22	$ 11,460,492.46
1913	20,837.61	1,175,747.46
Dec. 31, 1913	$ 182,050.83	$ 12,636,239.92
1914	10,448.96	843,735.70
Dec. 31, 1914	$ 192,499.79	$ 13,479,975.62
1915	1,196.26	(311,023.85)
Dec. 31, 1915	$ 193,696.05	$ 13,168,951.77
1916	10,729.58	(139,055.13)
Dec. 31, 1916	$ 204,425.63	$ 13,029,896.64
1917	2,922.00	(241,622.85)
Dec. 31, 1917	$ 207,347.63	$ 12,788,273.79
1918	964.78	100,753.49
Dec. 31, 1918	$ 208,312.41	$ 12,889,027.28
1919	20,503.35	(54,590.79)
Dec. 31, 1919	$ 228,815.76	$ 12,834,436.49
1920	43,245.85	33,979.42
Dec. 31, 1920	$ 272,061.61	$ 12,868,415.91
1921	17,260.00	(46,928.15)
Dec. 31, 1921	$ 289,321.61	$ 12,821,487.76
Jan.-June 1922		14,610.98
June 30, 1922	$ 289,321.61	$ 12,836,098.74
July-Dec. 1922	5,599.93	1,672,417.50
December 31, 1922	$ 294,921.54	$ 14,508,516.24
Jan.-May 1923	2,205.14	88,963.19
June 1, 1923	$ 297,126.68	$ 14,597,479.43
June - Dec. 1923	(30,067.17)	(60,585.43)
December 31, 1923	$ 267,059.51	$ 14,536,894.00

0988

Plaintiff's Exhibit No.820

(STATEMENT: To the foregoing summary sheets of Plaintiff's Exhibit No.820, there are attached, in the original exhibit, detailed schedules of the real estate comprised in each of the stations mentioned in the summary, consisting of 75 pages.)

PLAINTIFF'S EXHIBIT NO. 821

SCHEDULE BB

CONSOLIDATED GAS COMPANY OF NEW YORK
DETAILED STATEMENT OF THE COST OF THE COMPANY'S
MANUFACTURING PLANTS AND HOLDER STATIONS
TO AND INCLUDING DECEMBER 31st, 1923.

CONSOLIDATED GAS COMPANY OF N.Y.
BOOK VALUE OF PLANTS

	E.14 St.Sta.	W.18 St.Sta.	E.21 St.Sta.	W.42 St.Sta.	W.44 St.Sta.	E.63 St.Sta.	W.65 St.Sta.	E.99 St.Sta.	E.111 St.Sta.
Nov.11,1884	$1,706,445.00	$1,922,984.21	$2,879,000.00	$1,456,527.00	$1,815,125.00	$205,025.00	387,448.00	$983,937.20	806,000.00
1884	66.75		186.37		232.79				
Dec.31,1884	1,706,511.75	1,922,984.21	2,879,186.37	1,456,527.00	1,815,457.79	205,025.00	387,448.00	983,937.20	806,000.00
1885	2,363.54	3,546.04	2,009.95	7,537.16	360.44			5,822.04	4,952.50
Dec.31,1885	1,704,148.21	1,919,438.17	2,877,176.42	1,464,064.16	1,815,818.23	205,025.00	387,448.00	989,759.24	801,047.50
1886		63.00	2,220.35	6,859.45	1,113.99	53.58	26,250.00	5,870.55	
Dec.31,1886	1,704,148.21	1,919,501.17	2,874,956.07	1,470,923.61	1,816,932.22	205,078.58	413,698.00	995,629.79	801,047.50
1887	269,634.51	24.00	4,631.51		42,839.46		19,673.75	4,143.10	295.40
Dec.31,1887	1,973,782.72	1,919,525.17	2,879,587.58	1,470,923.61	1,859,771.68	205,078.58	433,371.75	999,772.89	801,342 90
1888	338,877.13	13,784.63	36,789.67	225.00	55,656.44	17,924.24	27,810.02	7.242.85	20,443.23
Dec.31,1888	2,312.659.85	1,933,309.80	2,916,377.25	1,470,698.61	1,915,428.12	223.002.82	461,181.77	1,007,015.74	821,786.15
1889	9,584.25	622.22	12,191.64	6,936.86	151.45	261,098.10	4,246.10	2,664.43	14,164.06
Dec.31,1889	2.322 244.10	1,933,932.02	2,928,568.89	1,477,635.47	1.915,579.57	484,100.92	465,427.87	1.009.680.17	835,950.19
1890	1,212.52	15,942.09	7,006.29	11,618.01	5,843.11	72,352.22		161.69	4,829.64
Dec.31,1890	2,323,456.62	1,949 874.11	2,935.575.18	1.489,253.48	1.921,422.68	556,453.14	465,427.87	1,009,841.86	840,780.03
1891	377.91		191.995.43	1,050.00	1,149.83	1,756.92	98.88	18.992.70	5,240.39
Dec.31,1891	2,323,834.53	1,949,674.11	3,127 570.61	1,488 203.48	1,922,572.51	558.210 06	465,526.75	1.028.834.56	946,020.42
1892			87 687.34	4,656.00	34,176.92	832.98	71,795.72	39.53	
Dec.31,1892	2,323,834.53	1,949,874.11	3 215,257.95	1,492,859.48	1,888,395.69	559,043.04	537,322.47	1,028.874.09	846,020.42
1893		296,963.55	32,262 51	3,262.39	13,779.14	2,611.32	280,560.61	11,075.66	
Dec.31,1893	2,323,834.53	2,246,837.66	3,247,520.46	1,496,121.87	1,874,616.45	561.654.36	817,883.08	1,039,949.75	846,020.42
1894	4,502.44	93 444.93	8,980.48	5,600.00	1,569.36	1,183.99	55,108.23		
Dec.31,1894	2.328.336 97	2,340,282.59	3,256,500.94	1,490,521.87	1,876,185.81	562,838.35	872.991.31	1,039,949.75	846,020.42
1895	10.595 93	1,963 17	2.214.76	170.00	2,162.29				
Dec.31,1895	2,338,932.90	2,342,245.76	3 258,715.70	1,490,691.87	1,878,348.10	562,838.35	872,991.31	1,039,949.75	846,020.42
1896	709.45	13.96	11,680.67	1,363.00	10.44			2.271.08	3,500.00
Dec.31,1896	2,339,642.35	2,342,259.72	3,270.396.37	1,489,328.87	1,878,358.54	562,838.35	872,991.31	1,042,220.83	842,520.42
1897	3,245 83	2,501.86	11,771.35		3,011.66			627.53	
Dec.31,1897	2,342,886.18	2,344,761.58	3,282,167.72	1,489,328.87	1,881,370.20	562,838.35	872,991.31	1,042,848.36	842.520.42
1898	316.18		36,734.41	220.85	7,767.86			2,574.79	
Dec.31,1898	2,343,204.36	2,344,761.58	3.245,433.31	1,489,549.72	1,889,138.06	562,838.35	872,991.31	1,045,423.15	842,520.42
1899	1.689.91		47,474.32		31,632.60		621.81	2,225.06	
Dec.31,1899	2,344 894.27	2,344,761.58	3,292,907.63	1,489,549.72	1,920,770.66	562,838.35	873,613.12	1,047,648.21	842,520.42
1900	521.71	359.11	22,975.42	3,115.99	9,679.19		139,021.50	10,841.12	225,809.02
Dec.31 1900	2.345.415.98	2,345,119.69	3,315,883 06	1,492,665.71	1,911,091.47	562,838 35	1.012,634.62	1.036 807.09	616,711.40
1901	10,367.13	3,012.31	67,793.33	3,070.76	8,845 27		157,476.03	21.229.98	3,745.12
Dec.31,1901	2,355,783.11	2,342,132.00	3,383,676.39	1,495,736.47	1,919,936.74	562.838.35	1,170 110.65	1.058.037.07	620,456.52
1902	19,077.64	921.02	19,280.01	1,864.96	2,531.06		4,525.61	2,534.33	295,385.36
Dec.31,1902	2.374,860.95	2,347 210.98	3,402 956.40	1,497,601.43	1,922,467.80	562,838.35	1.174,636.26	1,050 571.45	915.841.88

CONSOLIDATED GAS COMPANY OF N.Y.
BOOK VALUE OF PLANTS

	E.14 St.Sta.	W.18 St.Sta.	E.21 St.Sta.	W.42 St.Sta.	W.44 St.Sta.	E.63 St.Sta.	W.68 St.Sta.	E.99 St.Sta.	W.111 St.Sta.
Dec.31,1902	$2,374,860.95	$2,347,210.98	$3,402,956.40	$1,497,601.43	$1,922,467.80	$562,838.36	$1,174,636.86	$1,050,571.45	$918,841.88
1903	6,294.87	946.32	36,273.60		11,999.61	167.49	2,244.68	1,502.78	128,471.09
Dec.31,1903	2 391,155.82	2,348,157.30	3,439,230.00	1,497,601.43	1,934,467.41	563,006.84	1,176,880.94	1,051,874.23	1,044,312.97
1904	5,772.83	1,000.00	160,512.39	364.19	26,432.14		2,319.44	44,904.21	139.47
Dec.31,1904	2,386,928.35	2,347,157.30	3,599,742.39	1,497,965.62	1,960,899.55	563,006.84	1,179,200.38	1 106,778.44	1,044,452.44
1905	22,369.26		67,905.70	3,089.39	8,194.98	13,848.92	1,070.72	400.84	114.27
Dec.31,1905	2,409,298.61	2,347,157.30	3,667,648.09	1,501,055.01	1,966,094.53	576,854.76	1,180,271.10	1,107,179.28	1,044,566.71
1906	33,052.11	461.85	114,312.13		2,594.79	445.83	282.20	304 46	106.51
Dec.31,1906	2,442,340.72	2,347,619.15	3,781,960.22	1,501,055.01	1,968,689.32	576,108.93	1,180,553.30	1,107,483.74	1,044,672.22
1907	5,569.00	660.96	36,346.93	125.65	798.24	177 189.37	6,162.76	4.175 00	596.59
Dec.31,1907	2,436,771.72	2,348,280.11	3,818,287.15	1,501,180.66	1,969,487.56	398,919.56	1,186,716.06	1,103,308.74	1,044,075.63
1908	9,881.59	23.66	202,650.33		2,433.20	480,66	118.90	904.07	18,149.11
Dec.31,1908	2,448,653.31	2 348,303.77	3,615,636.82	1,501,180.66	1,971,970.76	399,400.22	1,186,834.96	1,104,212.81	1,062,224.74
1909	346.93	674.76	5,385.98	828.29	6,800.82	1,180.41		1,000.40	50 571.26
Dec.31,1909	2,447,000.24	2,348,978.53	3,621,022.80	1,501,706.95	1,978,471.28	400,580.63	1,186,834.96	1,105,213.21	1,011,655.48
1910	3,771.64	498,462.08	7,029.80	1,626.80	10,154.08		1,087 34	4,521.81	24,697.49
Dec.31,1910	2,450,771.88	1,850,516.45	3,628,052.60	1,503,336.75	1,988,625.36	400,580.63	1,187,922.30	1,109,715.02	1,036,350.97
1911	28 435.18	1,960.20	26,721.66	883.69	3,561.22	349.53	647.35	5,490.96	15,284 04
Dec.31,1911	2,422,336.70	1,852,476.65	3,664,774.26	1,504,219.44	1,992,186 58	400,930.16	1,187,274.95	1,115,205.98	1,021,066.93
1912	15,006.72	347.00	56,293.31		12,230.35	77.35	26,317.95	22,566.44	922 82
Dec.31,1912	2,437,343.42	1,852,823.65	3,711,067.57	1,504,219.44	2,004,416.93	401,007.51	1,213,592.90	1,137,772.42	1,020,144.11
1913	20,243.59	749,370.79	33,198.64	65.44	1,388.80	190.97	25,084.14	7,426.48	2,577.57
Dec.31,1913	2,457,587.01	1,103,452.86	3,744,266.21	1,504,284.88	2,005,805.73	401,198.48	1,238 677.04	1,145 198.87	1,022,721.68
1914	8,070.38	887 019.01	22,867.78	3,116.97	809.42		4,453.99	2,596.96	48,338.00
Dec.31,1914	2,465,657.39	216,433.85	3,767,133.99	1,507,401.85	2,004,996.31	401,198.48	1,243,131.03	1,147,795.83	1,071,059.68
1915	866.10	308.31	3,818.89	311.07			6,485.21	7,265 95	11,176.06
Dec.31,1915	2,466,223.49	216,742.66	3,770,952.88	1,507,712.92	2,004,996.31	401,198.48	1,249,616.24	1,140,529.88	1,082,235.74
1916	399 454.04	18,000.58	33.50	6,263.35		6.00	4 902.59	752.16	499.93
Dec.31,1916	2,066,769.45	198,742.08	3,770,986.38	1,501,449.57	2,004,996.31	401,204.48	1,244,713.65	1,141,282.04	1,082,735.67
1917	1,021.76	151,885.48	2,432.96	57 780.87			899.53	11,337.99	3,396.59
Dec.31,1917	2,067,791.21	46,856.60	3,768,553.42	1,443,668.70	2,004,996.31	401,204.48	1,243,814.12	1,152,620 03	1,086 132.26
1918	17.86		47,720.10	3,668.50			426 708.75	5,782.94	270 00
Dec.31,1918	2,067,773.35	46,856.60	3,816,273.52	1,447,337.20	2,004,996.31	401,204.48	817,105.37	1,158,402.97	1,085 862 26

CONSOLIDATED GAS COMPANY OF N.Y.
BOOK VALUE OF PLANTS

	W.132nd St. Station	Inwood Station	Kingsbridge	E.132nd St. Testing Sta.	Engineering & Superintendence	Interest during const. (Cash Disc.)	Totals
Nov.11,1884		$20,000.00					$12,182,491.41
1884							585.91
Dec.31,1884		20 000.00					12,183,077.32
1885							847.61
Dec.31,1885		20,000.00					12,183,924.93
1886							37,990.22
Dec.31,1886		20,000.00					12,221,915.15
1887							341,241.73
Dec.31,1887		20,000.00					12,563,156.89
1888					$9,681.82		527.985.03
Dec.31,1888		20,000.00			9,681.82		13,091,141.91
1889		2,790.93			5,758.38		320,208.42
Dec.31,1889		22,790.93			15,440.20		13,411,350.33
1890		2,152.97			271.82		121,390.56
Dec.31,1890		24,943.90			15,712.02		13,532,740.99
1891					6,709.18		225,271.24
Dec.31,1891		24,943.90			22,421.20		13,758,012.13
1892		1,373.91			4,735.20		136,043.76
Dec.31,1892		26 317.81			27 156.40		13,894,955.89
1893		4,300.00			17.50		617,274.40
Dec.31,1893		30,617.81			27,173.90		14,512,230.29
1894					3,587.60		162,777.23
Dec.31,1894		30,617.81			30,761.70		14,675,007.52
1895							17,106.15
Dec.31,1895		30,617.81			30,761.70		14,692,113.67
1896							9,822.60
Dec.31,1896		30,617.81			30,761.70		14,701,936.27
1897							21,158.23
Dec.31,1897		30 617.81			30,761.70		14,723,094.50
1898							25,854.73
Dec.31,1898		30,617.81			30,761.70		14,697,289.77
1899					278.40		83,922.10
Dec.31,1899		30,617.81			31,040.10		14,781,161.87
1900					2,109.91		78,226.68
Dec.31,1900		30,617.81			33,150.01		14,702,935.19
1901		757.84			4,664.90		280,962.67
Dec.31,1901		31,375.65			37,814.91		14 983,897.86
1902		63.17			4,615.41		348,956.78
Dec.31,1902		31,438.82			42,430.32		15,332,854.64

CONSOLIDATED GAS COMPANY OF N.Y.
BOOK VALUE OF PLANTS

	W.132nd St. Station	Inwood Station	Kingsbridge	..132nd St. Testing Sta.	Engineering & Superintendence	Interest during const. (Cash Disc.)	Totals
Dec.31,1902		$31,438.82			$42,430.32		$15,332,854.64
1903					6,994.40		184,694.54
Dec.31,1903		31,436.82			49,424.72		15,827,549.18
1904					8,057.29		247,801.96
Dec.31,1904		31,438.82			57,482.01		16,775,051.14
1905	272,838.47				13,807.98		400,331.53
Dec.31,1905	272,838.47	31,438.82			71,289.99		16,175,382.67
1906	168,907.16	848.77			13,264.82		333,687.97
Dec.31,1906	441,745.63	32,287.59			84,564.81		16,509,070.64
1907	1,541.74	5.63			13,094.06		128,613.99
Dec.31,1907	443,287.37	32,293.22			97,646.87		16,380,256.65
1908	627.86				15,211.07		154,770.21
Dec.31,1908	443,915.23	32,293.22			112,559.94		16,226,486.44
1909	3,658.04	212.29			26,258.52		4,825.12
Dec.31,1909	447,573.27	32,505.51			139,118.46		16,220,661.32
1910	56.42	99.24	$275,258.89		28,355.32		141,823.25
Dec.31,1910	447,629.69	32,604.75	275,258.89		167,473.78		16,078,836.07
1911	16,550.61		439,795.03		37,239.76		498,186.69
Dec.31,1911	464,180.30	32,604.75	715,053.92		204,713.54		16,567,024.16
1912	8,302.40	46.64	180,378.23		45,262.20		365,905.77
Dec.31,1912	472,482.70	32,651.39	895,432.15		249,975.74		16,932,929.95
1913	1,064.59		10,555.68		43,153.59		604,421.36
Dec.31,1913	473,547.29	32,651.39	905,987.80		295,129.33		16,328,608.57
1914	215.85		392.10		45,138.93		752,637.47
Dec.31,1914	473,763.14	32,651.39	906,379.90		338,268.26		15,575,871.10
1915			491.10		43,098.95	$3,590.58	55,399.66
Dec.31,1915	473,763.14	32,651.39	906,871.00		381,367.21	3,590.58	15,631,270.76
1916	148.39		604.24	$7,450.00	120,464.10	5,339.68	544,930.12
Dec.31,1916	473,911.53	32,651.39	907,475.24	7,450.00	260,903.11	8,930.26	15,086,340.64
1917	1,969.71		1,628.94		32,241.40	7,592.71	168,998.16
Dec.31,1917	475,881.24	32,651.39	909,104.18	7,450.00	293,144.51	16,522.97	14,917,342.48
1918	15.50		3,197.86		30,763.00	457.94	536,306.57
Dec.31,1918	475,896.74	32,651.39	912,299.04	7,450.00	323,907.59	16,980.91	14,581,035.91

CONSOLIDATED GAS COMPANY OF NEW YORK
BOOK VALUE OF PLANTS

	11th St. Sta.	14th St. Sta.	15th St.Sta.	17th St.Yard	18th St.Sta.	21st St.Sta.	42nd St.Sta.	Unamortized Investment in 42nd St.Plant
Dec. 31, 1918	-	$2,067,773.35	-	-	$46,856.60	$3,816,273.52	$1,447,337.20	
1919	-	(120,720.90)	-	-	(230.00)	81,865.15	(169,443.00)	-
Dec. 31, 1919	-	1,947,052.45	-	-	46,626.60	3,898,138.67	1,277,894.20	-
1920	-	(578,221.04)	-	-	-	11,826.23	(5,000.00)	-
Dec. 31, 1920	-	1,367,831.41	-	-	46,626.60	3,909,964.90	1,272,894.20	-
1921	-	11,724.72	-	-	-	31,098.98	-	-
Dec. 31, 1921	-	1,379,556.13	-	-	46,626.60	3,941,063.88	1,272,894.20	-
Jan-June 1922	-	528.14	-	-	-	13,562.50	(2,900.00)	-
June 30, 1922	-	1,380,084.27	-	-	46,626.60	3,954,626.38	1,269,994.20	-
July-Dec.1922	$3,537,126.65	(168,711.04)	-	-	(308.81)	(69,192.82)	-	-
Dec. 31, 1922	3,537,126.65	1,211,373.23	-	-	46,317.79	3,886,433.56	1,269,994.20	-
Jan.-May 1923	10,800.86	5,819.82	-	-	-	169,991.29	-	-
June 1, 1923	3,547,927.51	1,217,193.05	-		46,317.79	4,056,424.85	1,269,994.20	-
June-Dec.1923	36,300.96	(1,217,193.05)	$655,783.09	$21,553.52	-	875,868.28	(1,268,958.20)	$1,193,908.20
Dec. 31, 1923	$3,584,228.47	-o-	$655,783.09	$21,553.52	$46,317.79	$4,932,293.13	$1,036.00	$1,193,908.20

3367

CONSOLIDATED GAS COMPANY OF NEW YORK
BOOK VALUE OF PLANTS

	44th St. Sta.	63rd St.Sta.	65th St.Sta.	99th St. Sta.	111th St.Sta.	132nd St.Sta	Kingsbridge Station	Inwood Station
Dec 31, 1918	$2,004,996.31	$401,204.48	$817,105.37	$1,156,402.97	$1,085,862.26	$475,696.74	$912,299.04	$32,651.39
1919	2,960.54	253.25	-	(18,460.99)	197.68	1,901.48	7,667.02	(28,357.49)
Dec. 31, 1919	2,007,956.85	401,457.73	817,105.37	1,139,941.98	1,086,059.94	477,798.22	919,966.06	4,293.90
1920	113.81	398.01	17.24	1,770.07	14,225.12	11,808.84	652.02	
Dec. 31, 1920	2,008,070.66	401,855.74	817,122.61	1,141,712.05	1,100,285.06	489,607.06	920,618.08	4,293.90
1921	-	-	-	7,155.68	4,967.71	10,918.31	78.45	-
Dec. 31, 1921	2,008,070.66	401,855.74	817,122.61	1,148 867.73	1,105 252.77	500,525.37	920,696.53	4,293.90
Jan.-June 1922	-	4,358.87	-	1,282.41	2,843.49	82.48	-	-
June 30. 1922	2,008,070.66	406,214.61	817,122.61	1,150,150.14	1,108,096.26	500,607.85	920,696.53	4,293.90
July-Dec.1922	(3,500.00)	219,911.62	24.36	(51,926.79)	1,263.58	1,055.33	5,146.57	-
Dec. 31, 1922	2,004,570.66	626,126.23	817,146.97	1,098,221.35	1,109,359.84	501,663.18	925,843.10	4,293.90
Jan.-May 1923		(122,904.37)	24.79	9,796.14	292.96	32.21	123.57	-
June 1, 1923	2,004,570.66	503,221.86	817,171.76	1,108,017.49	1,109,652.80	501,695.39	925,966.67	4,293.90
June-Dec.1923	30.10	13,674.62	6,599.65	28.032.67	406.51	2,342.37	1.34	-
Dec. 31, 1923	$2,004,600.76	$516,896.48	$823,771.41	$1,136,050.16	$1,110,059.31	$504,037.76	$925,968.01	$4,293.90

S 3365

CONSOLIDATED GAS COMPANY OF NEW YORK
BOOK VALUE OF PLANTS

	E. 132nd Street and Locust Ave. Testing Station	Hunts Point Station	Engineering & Superintendence	Cash Discounts on Construction Expenditures	T o t a l
Dec. 31, 1918	$7,450.00	-	$323,907.59	($16,980.91)	$14,581,035.91
1919	-	-	24,444.50	(86.97)	(213,009.73)
Dec. 31, 1919	7,450.00	-	345,352.09	(17,067.88)	14,363,026.18
1920	-	-	22,667.08	(193.07)	(520,935.69)
Dec. 31, 1920	7,450.00	-	371,019.17	(17,260.95)	13,842,090.49
1921	-	-	29,729.63	(2,754.69)	92,918.79
Dec. 31, 1921	7,450.00	-	400,748.80	(20,015.64)	13,935,009.28
Jan.-June 1922	-	-	(15,685.36)		4,072.53
June 30, 1922	7,450.00	-	385,063.44	(20,015.64)	13,939,081.81
July-Dec.1922		-	68,276.52	(5,028.87)	3,535,134.30
Dec. 31, 1922	7,450.00	-	453,339.96	(25,044.51)	17,474,216.11
Jan.-May 1923	-	-	(5,124.86)		65,852.41
June 1, 1923	7,450.00	-	445,215.10	(25,044.51)	17,540,068.62
June-Dec.1923	(7,450.00)	$36,946.02	76,375.05	(6,609.43)	447,611.70
Dec. 31, 1923	-o-	$36,945.02	$521,590.15	(31,653.94)	$17,987,680.22

Plaintiff's Exhibit No.821

(STATEMENT: To the foregoing summary sheets of Plaintiff's Exhibit No.821, there are attached, in the original exhibit, detailed schedules of the cost of the manufacturing plants and holder stations to and including December 31, 1923, consisting of 86 pages.)

PLAINTIFF'S EXHIBIT NO. 822

SCHEDULE CO

CONSOLIDATED GAS COMPANY OF NEW YORK
DETAILED STATEMENT OF THE COST OF THE COMPANY'S
STREET MAINS AND SERVICES
TO AND INCLUDING DECEMBER 31, 1923

CONSOLIDATED GAS COMPANY OF NEW YORK

STREET MAINS

FROM DATE OF CONSOLIDATION TO

DECEMBER 31, 1923

CONSOLIDATED GAS COMPANY OF NEW YORK
INVESTMENT IN STREET MAINS

Balance December 31, 1888 - Carried Forward						3,965,375	$ 5,769,873.93
Year	Size	Feet of Mains Laid	Mains Taken up or Abandoned	Adjustment to Book Balance	Net Increase		
1889	1¼"		176		176		
	2"		1,213		1,213		
	3"	753	17,233		16,480		
	4"	3,843	9,638.6"	(8)	5,803.6"		
	6"	95,800.6"	15,723	1,044	79,033.6"		
	8"	13,015	347	4	12,672		
	10"	22	42		20		
	12"	6,855	694	794	7,367		
	16"		12		12		
		122,288.6"	45,078.6"	1,842	75,368		200,130.04
		Balance December 31, 1889				4,040,743	$ 5,970,003.97
1890	2"		30		30		
	3"	188	30,125	10	29,925		
	4"	7,003	25,105	60.5"	18,021.7"		
	6"	81 181.4"	20,882	1,468.2"	61,767.6"		
	8"	19,656	567	83	19,172		
	10"	32	42		10		
	12"	17,334	179	794	17,949		
	20"	4,673	1,539	20	3,154		
	24"	1,774			1,774		
		131,841.4"	78,467	2,455.7"	55,829.11"		109,807.72
		Balance December 31, 1890				4,096,672.11"	$6,087,811.69
1891	3"	185	27,985.7"		27,800.7"		
	4"	6,354	28,533.5"		22,179.5"		
	6"	86,211.11"	25,326.6"		60,865.5"		
	8"	15,326.7"	10,998		4,328.7"		
	10"	1,648	17		1,631		
	12"	8,193.7"	2,467		5,726.7"		
	16"		378		378		
	20"	29,830.6"	4,518		25,312.6"		
	24"	837			837		
	30"	14,014			14,014		
		162,600.7"	100,223.6"		62,377.1"		243,144.44
		Balance December 31, 1891				4,158,950	$ 6,330,956.13
1892	3"		53,895		53,895		
	4"	5,699	14,241		8,542		
	5"		1,001		1,001		
	6"	82,996	3,771		79,225		
	8"	24,539	2,410		22,129		
	12"	5,329			5,329		
	20"	5,415	180		5,435		
	30"	24,939			24,939		
		148,917	75,498		73,419		224,750.00
		Balance December 31, 1892				4,232,369	$ 6,555,706.13
1893	2"		541		541		
	3"		42,228		42,228		
	4"	5,444	47,976		42,532		
	5"		383		383		
	6"	92,468	2,206		90,262		
	8"	14,686	3,023		11,663		
	12"	16,786			16,786		
	16"	21	238		217		
	30"	228			228		
		129,633	96,595		33,038		70,126.40
		Balance December 31, 1893				4,265,407	$ 6,625,832.53

CONSOLIDATED GAS COMPANY OF NEW YORK
INVESTMENT IN STREET MAINS

Mains Acquired at Consolidation - November 11th, 1884			Total	Cost
	Size	Feet		
	1½"	1,585		
	2"	42,508		
	3"	837,377		
	4"	693,251		
	5"	7,719		
	6"	1,117,707		
	8"	304,439.8"		
	10"	68,802		
	12"	219,222		
	16"	84,842		
	18"	29,693		
	20"	96,969		
	24"	24,269		
	30"	22,685	3,751,066.8"	$ 5,233,962.10

Year	Size	Feet of Mains Laid	Mains Taken up or Abandoned	Net Increase		
Nov. 11/84						
Dec. 31/85	2"		16,535	(16,535)		
	3"	1,740	5,048	(3,308)		
	4"	6,437	6,956	(519)		
	5"		84	(84)		
	6"	40,399	5,797	34,602		
	8"	8,119.6"		8,119.6"		
	10"	532		532		
	12"	1,563	11	1,552		
	16"	1		1		
	20"	3,979	36	3,943		
		62,770.6"	34,437	28,333.6"		91,777.79
		Balance December 31, 1885			3,779,400.2"	$ 5,325,739.89
1886	2"	100	180	(80)		
	3"	380	2,616	(2,236)		
	4"	2,426	5,519	(3,093)		
	6"	31,272	1,654	29,618		
	8"	15,056		15,056		
	10"	240		240		
	12"	3,010		3,010		
	18"	7		7		
	20"	4,123.6"		4,123.6"		
	30"	203		203		
		56,817.6"	9,969	46,848.6"		64,911.57
		Balance December 31, 1886			3,826,248.8"	$ 5,390,651.46
1887	3"	224	4,209	(3,985)		
	4"	3,649.6"	6,081	(2,431.6		
	6"	48,987	4,065	41,922		
	8"	7,912.6"	46	7,866.6"		
	12"	9,079.6"	404	8,675.6"		
	20"	9,777		9,777		
	24"	3,088		3,088		
		79,717.6"	14,805	64,912.6"		125,591.58
		Balance December 31, 1887			3,891,161.2"	$ 5,516,243.04
1888	2"		80	(80)		
	3"	130	6,218	(6,088)		
	4"	4,359.6"	7,985	(3,625.6"		
	6"	43,401.4"	3,095.6"	40,305.10"		
	8"	11,788	271	11,517		
	12"	7,976	9	7,967		
	20"	1,637.4"	1,497	140.4"		
	24"	30.1"		30.1"		
	30"	24,047.1"		24,047.1"		
		93,369.4"	19,155.6"	74,213.10"		253,630.89
		Balance December 31, 1888			3,965,375	$ 5,769,873.93

CONSOLIDATED GAS COMPANY OF NEW YORK
INVESTMENT IN STREET MAINS

Year	Size	Feet of Mains Laid	Mains Taken up or Abandoned	Net Increase		
Balance December 31, 1893 - Carried Forward					4,265,407	$ 6,625,832.53
1894	2"		1,822	1,822		
	3"	3,305	32,567	29,262		
	4"	10,962	14,590	3,628		
	5"		216	216		
	6"	61,493	7,788	53,705		
	8"	15,949	3,185	12,764		
	12"	9,413		9,413		
	16"	8,096		8,096		
	30"	13,691		13,691		
		122,909	60,168	62,741		174,074.45
Balance December 31, 1894					4,328,148	$ 6,799,906.98
1895	3"		73,166	73,166		
	4"	4,283	11,526	7,243		
	6"	99,264	1,276	97,988		
	8"	15,997	100	15,897		
	12"	7,534		7,534		
		127,078	86,068	41,010		55,946.78
Balance December 31, 1895					4,369,158	$ 6,855,853.76
1896	2"		190	190		
	3"		57,564	57,564		
	4"	2,522	23,067	20,545		
	6"	102,677	4,034	98,643		
	8"	17,354		17,354		
	12"	1,804		1,804		
		124,357	84,855	39,502		52,253.33
Balance December 31, 1896					4,408,660	$ 6,908,107.09
1897	3"	13,182	21,768	8,586		
	4"	1,443	11,326	9,883		
	5"		78	78		
	6"	65,000	7,743	57,257		
	8"	3,525		3,525		
	10"	167		167		
	12"	1,680		1,680		
	16"		37	37		
	20"	1,505		1,505		
		86,502	40,952	45,550		30,882.48
Balance December 31, 1897					4,454,210	$ 6,938,989.57
1898	2"	955		955		
	3"		56,029	56,029		
	4"	5,272	8,763	5,491		
	6"	93,987	595	93,392		
	8"	11,418	76	11,342		
	12"	1,581		1,561		
	18"		67	67		
	20"	67		67		
	30"	12,955		12,955		
		124,235	65,530	58,705		130,858.66
Balance December 31, 1898					4,512,915	$ 7,069,848.23
1899	3"		17,628	17,628		
	4"	230	2,247	2,017		
	6"	22,298	6,548	15,750		
	8"	8,469	28	8,441		
	12"	334		334		
	20"	133		133		
	24"		187	187		
	30"	6,762		6,762		
		38,226	26,638	11,588		57,334.15
Balance December 31, 1899					4,524,503	$ 7,127,182.38

CONSOLIDATED GAS COMPANY OF NEW YORK
INVESTMENT IN STREET MAINS

Balance December 31, 1899 - Carried Forward					4,524,503	$ 7,127,182.38
Year	Size	Feet of Mains Laid	Mains Taken up or Abandoned	Net Increase		
1900	3"		1,096	1,096		
	4"	187	1,049	862		
	6"	6,249	2,778	3,471		
	8"	15,762	39	15,723		
	20"	1,210	56	1,154		
	24"	3,349		3,349		
	30"	14,533		14,533		
		41,290	5,018	36,272		
		Balance December 31, 1900				192,817.93
					4,560,775	$ 7,320,000.31
1901	3"		2,260	2,260		
	4"		725	725		
	6"	4,125	315	3,810		
	8"	5,586		5,586		
	12"	107	2,503	2,396		
	20"	19,950		19,950		
	24"	6,524		6,524		
	30"	6,197		6,197		
		42,489	5,803	36,686		
		Balance December 31, 1901				296,545.25
					4,597,461	$ 7,616,545.56
1902	3"		5,111	5,111		
	4"	135	14,080	15,945		
	5"		85	85		
	6"	14,450	3,211	11,239		
	8"	886	540	346		
	12"	752	98	654		
	20"	293	232	61		
	24"	600		600		
	30"	1,467	15,236	13,769		
	36"	3,192		3,192		
		21,775	38,593	16,818		
		Balance December 31, 1902				299,073.14
					4,580,643	$ 7,317,472.42
1903	3"		4,043	4,043		
	4"	359	19,349	18,990		
	6"	34,922	8,609	26,313		
	8"	486	50	436		
	12"	2,829	182	2,647		
	16"	4,020		4,020		
	20"	7,420		7,420		
	24"	44		44		
	30"	19		19		
		50,099	32,233	17,866		
		Balance December 31, 1903				170,072.00
					4,598,509	$ 7,487,544.42
1904	3"		2,350	2,350		
	4"		6,566	6,566		
	6"	14,931	3,273	11,658		
	8"	6,842		6,842		
	12"		142	142		
	20"		11	11		
	30"	5,209		5,209		
	36"	19,050		19,050		
		46,032	12,342	33,690		
		Balance December 31, 1904				252,223.76
					4,632,199	$ 7,739,768.18

CONSOLIDATED GAS COMPANY OF NEW YORK
INVESTMENT IN STREET MAINS

Balance December 31, 1904 - Carried Forward					4,632,199	$ 7,739,768.18
Year	Size	Feet of Mains Laid	Mains Taken up or Abandoned	Net Increase		
1905	2"		18,732	(18,732)		
	3"		227,795	(227,795)		
	4"	236	190,954	(190,718)		
	5"		3,103	(3,103)		
	6"	26,316	2,850	23,466		
	8"	15,532		15,532		
	10"		56	(56)		
	12"	4,843		4,843		
	16"	3,204		3,204		
	20"		130	(130)		
	24"	5,628		5,628		
	30"		130	(130)		
	36"	2,277.5"		2,277.5"		
	48"	1,772.7"		1,772.7"		
		59,809	443,750	383,941)		241,242.03
		Balance December 31, 1905			4,248,258	$ 7,498,526.15
1906	1½"	-	-	-		
	2"	94		94		
	3"	166	7,199	(7,033)		
	4"	189	10,549	(10,360)		
	5"		47	(47)		
	6"	12,413	2,122	10,291		
	8"	15,516	52	15,464		
	10"	-	-	-		
	12"	4,578		4,578		
	16"	980		980		
	18"	-	-	-		
	20"	-	-	-		
	24"		258	(258)		
	30"	307	5,393	(5,086)		
	36"	492	19,008	(18,516)		
	48"	468		468		
		35,203	44,628	9,425)		3,769.96
		Balance December 31, 1906			4,238,833	$ 7,494,756.19
1907	1½"	-	-	-		
	2"	-	-	-		
	3"		6,409	(6,409)		
	4"	1,211.8"	7,338	(6,126.4")		
	5"		27	27		
	6"	9,209	1,435	7,774		
	8"	3,761	37	3,724		
	10"		127	127		
	12"	9,477.6"		9,477.6"		
	16"	947	4,231	(3,284)		
	18"	-	-	-		
	20"	86.10"		86.10"		
	24"	142.11"	5,628	(5,485.1")		
	30"	8,663		8,663		
	36"	3,688.7"		3,688.7"		
	48"	71.10"		71.10"		
		37,259.4"	28,232	12,027.4"		287,583.16
		Balance December 31, 1907			4,250,860.4"	$ 7,782,339.35

CONSOLIDATED GAS COMPANY OF NEW YORK
INVESTMENT IN STREET MAINS

Balance December 31, 1907 - Carried forward 4,25 ,860.47 7,783.353 15

Year	Size	Feet of Mains Laid		Net Increase		
1908	1½"	-	-	-		
	2"	-	-	-		
	3"		.9			
	4"	488.8	L . 47			
	5"	-	-			
	6"	19,852	1 .			
	8"	14,571.4"	47.			
	10"	5	3. 42			
	12"	4,J56				
	16"	,976.4"				
	18"	-	-			
	20"	48.8"	152.			
	24"	364	-			
	32"	384.5	.9			
	36"	-	-	-		
	48"	-	-	-		
		. 6.-	35,149			
		Balance December 31, 1908				
1909	1½"		161			
	2"		-			
	3"	141	1. .9.9			
	4"	1 2 3	1			
	5"					
	6"	56,284.2	11.			
	8"	1. . 1				
	10"	6 .				
	12"	6,774	1.7..			
	16"	. 19.1	1,47..1	. 47		
	18"		15			
	20"		27			
	24"	35				
	32"	518	. 75..1			
	36"	224	1,381.			
	48"	4.833		4 833		
		65,932.11	.1,7.1.7	14,201.4"		
		Balance December 31, 1909			4,273,139 1	
1910	1½"	-	-	-		
	2"	-	-	-		
	3"		. . 1			
	4"	346	8,713.			
	5"		113			
	6"	11,614.6	6,88	4,716.6		
	8"	11,646	5 1	11,143		
	10"		1,617			
	12"	5, 49	1,618	,532		
	16"	-	-	-		
	18"	-	-	-		
	20"	· 2	45			
	24"	2,33	35	.,295		
	32"	23,744	-	22,744		
	36"	2 ,088		. 88		
	48"	8,916		. 8,916		
		63.753.6	25,231.	58,522		
		Balance December 31, 1910			4,331,661.1	9,11. . 44

3378

CONSOLIDATED GAS COMPANY OF NEW YORK
AND COMPANIES IN STREET MAINS

Balance December 31, 1910 - Carried Forward — 3,331,661.11" — $ 9,119,442.40

Year	Size	Feet of Mains Laid	Mains Taken up or Abandoned	Net Increase		
1911	1½"	-	-	-		
	2"	-	-	-		
	3"	651	6,464	(5,813)		
	4"	18	18,499.6	(18,481)		
	5"		233	233		
	6"	18,160.6"	3,372	12,788.6"		
	8"	24,865	4,495	20,370		
	10"		33	(33)		
	12"	3,330		3,330		
	16"	2,070	454	1,616		
	18"	-	-	-		
	20"		44			
	24"	10	2,320			
	30"	2,805	52	2,753		
	36"	1,598.6"		1,598.6"		
	48"	24,054.4"	792	23,262.4"		
		75,562.4	36,768.6	38,793.10"		
		Balance December 31, 1911				846,226.58
					4,370,454.11	$ 9,965,669.98
1912	1½"	-				
	2"	-	-	-		
	3"		-			
	4"	81	2,661.6"	(2,581.6")		
	5"	-	31,758	(31,677)		
	6"	22,536.6"	-	-		
	8"	14,032	2,010.6	20,525		
	10"	-	285	13,747		
	12"	3,457	-	-		
	16"	-	388	3,069		
	18"	-	-	-		
	20"	20,549.7"	-	-		
	24"	-	-	20,549.7"		
	30"	-	-	-		
	36"	113.6"	-	-		
	48"	31,156.3"	12	113.6"		
		91,937.10"	40,085	31,144.3"		
		Balance December 31, 1912		51,852.10"		980,931.08
					4,422,307.9"	$10,675,600.06
1913	1½"	-	-	-		
	2"	392		392		
	3"	647	2,360	1,701		
	4"	568.6"	5,685.6"	5,117		
	5"	-	-	-		
	6"	13,107.10"	7,347.2"	5,760.8"		
	8"	14,200.2"	4,912.8"	9,287.8"		
	10"	118	1,105	987		
	12"	3,252.6"	1,474	1,778.6"		
	16"	260		260		
	18"	-	-	-		
	20"	6,954	259	6,695		
	24"	471	4	467		
	30"	2,120.4"	52	2,068.4"		
	36"	4		4		
	48"	-	-	-		
		42,095.4"	23,189.2"	18,906.2"		
		Balance December 31, 1913			4,441,213.11"	188,745.64
						$10,914,345.70

3379

CONSOLIDATED GAS COMPANY OF NEW YORK
INVESTMENT IN STREET MAINS

Balance December 31, 1913 - Carried Forward					4,441,213.11"	$ 10,814,345.70
Year	Size	Feet of Mains Laid	Mains Taken up or Abandoned	Net Increase		
1914	1½"	-	-	-		
	2"	-	-	-		
	3"	-	1,254.9"	1.		
	4"	248	11,456	11.		
	5"	-	-	-		
	6"	6,688.3"	1,612.10"	5,075.5"		
	8"	7,462	1,929.9"	5,532.3"		
	10"	-	-	-		
	12"	188.8"	243.2"			
	16"		3.3"			
	18"	-	-	-		
	20"	21		21		
	24"		5.5"			
	30"	-	-	-		
	36"	-	-	-		
	48"	-	-	-		
		14,607.11"	16,505.3"	1,897.		27.771.64
		Balance December 31, 1914			4,439,316.7"	$10.842,117.34
1915	1½"	-	-	-		
	2"	-	-	-		
	3"	14	6,804.6"			
	4"	1,041.2"	11,528.7"			
	5"	-	-	-		
	6"	14,628.6	3,264.7"	11,363.11		
	8"	6,148.3"	2,164.2"	3,984.1"		
	10	680.1"	680.1			
	12	2,595.1"	451.10"	2,143.3"		
	16"	94.5"	55	39.5"		
	18"	140.3"		140.3"		
	20"	63	265			
	24"	134	25	109		
	30"	1,575	267.5"	1,307.7"		
	36"	-	-	-		
	48	35.10"	17.6"	18.4"		
		27,149.7"	25,523.8"	1,525.11		75,565.35
		Balance December 31, 1915			4,440,942.6"	10,917,682.69
1916	1½"	-	-	-		
	2"		84.10"			
	3"		3.522.6"			
	4"	1,012.8"	2,696.11			
	5"	-	-			
	6"	7,959.9"	3,332.5"	4,627.4"		
	8"	2,311.3"	911	1,400.3"		
	10"	48.1"	48.1"			
	12"	1,060.11"	520.8"	540.3"		
	16"	41.2"	41.2"			
	18"	-	-	-		
	20"	2,699.9"	367.9	2,332		
	24"	265	35	230		
	30"	69.9"	41.3"	46		
	36"	-	-	-		
	48"	65.2"	58.7"	6.7"		
		15,553.6"	11,660.8"	3,392.10		43.130.52
		Balance December 31, 1916			4,444,835.4"	10,960,813.21

CONSOLIDATED GAS COMPANY OF NEW YORK
INVESTMENT IN STREET MAINS

Balance December 31, 1916 - Carried Forward — 4,444,835.4" — $10,960,913.21

Year	Size	Feet of Mains Laid	Mains Taken up or Abandoned	Net Increase		
1917	1½"	-	-	-		
	2"	-	-	-		
	3"		711	(711)		
	4"	21.9"	773.4"	(751.7")		
	5"	-	-	-		
	6"	2,190.9"	1,189.11"	1,000.10"		
	8"	2,67[illegible].2"	282.6"	2,395.6"		
	10"		26.2"	(26.2")		
	12"	2[illegible]7.2"	166.9"	128.5"		
	16"	425.10"		425.10"		
	18"	-	-	-		
	20"	77.11"	167.2"	(89.3")		
	24"	-	-	-		
	30"		347.1"	(347.1")		
	36"	-	-	-		
	48"	-	-	-		
		5,6[illegible]1.7"	3,665'11"	2,025.8"		
		Balance December 31, 1917			4,446,861	25,278.67 / $10,986,091.88
1918	1½"	-	-	-		
	2"		167	(167)		
	3"		147.6"	(147.6")		
	4"	14.6"	3,776.2"	(3,761.8")		
	5"	-	-	-		
	6"	3,409.4"	583.1"	2,626.3"		
	8"	554.5"	42.6"	511.11"		
	10"	-	-	-		
	12"	10,682.10"		10,682.10"		
	16"	90.5"		90.5"		
	18"	-	-	-		
	20"		6.6"	(6.6")		
	24"	-	-	-		
	30"		411.3"	(411.3")		
	36"	-	-	-		
	48"	-	-	-		
		14,751.6"	5,134	9,617.6"		
		Balance December 31, 1918			4,456,478.6"	41,174.36 / $11,027,266.24
1919	3"	-	1,499	(1,49[illegible])		
	4"	50.4"	8,619.3"	(8,568.11")		
	6"	8,398.6"	39.5"	8,359.1"		
	8"	34.9"	28.	6.9"		
		8,483.7"	10,185.8"	(1,702.1")		
		Balance December 31, 1919			4,454,776.5"	8,631.77 / $11,035,898.01

3381

CONSOLIDATED GAS COMPANY OF NEW YORK
INVESTMENT IN STREET MAINS

Balance December 31, 1919 - Carried Forward						4,454,776.5"	$11,035,898.01
Year	Size	Feet of Mains Laid	Mains Taken up or Abandoned	Adjustment of Main Mileage	Net Increase		
1920	3"		100.	1,612.	1,512.		
	4"	46.4"	3,061.2"	6,108.5"	9,123.3"		
	5"			85.	85.		
	6"	365.3"	787.	8,296.7"	8,718.4"		
	8"	1,132.10"	1,465.	2,819.1"	2,486.11"		
	10"			3,121.	3,121.		
	12"		48.5"	325.	276.7"		
	16"	62.		1.3"	63.3"		
	20"		62.	12.1"	49.11"		
	24"			133.6"	133.6"		
	30"	460.7"	57.	37.9"	441.4"		
	36"			1.4"	1.4"		
	48"			34.8"	34.8"		
		2,067.	5,580.7"	12,731.4"	16,244.11"		5,114.26
		Balance December 31, 1920				4,438,531.6	$11,030,783.76
1921	1½"		48.		48.		
	3"		924.6"		924.6"		
	4"	240.	5,975.4"		5,735.4"		
	5"		7.6"		7.6"		
	6"	5,513.2"	261.6"		5,251.8"		
	8"	1,598.5"	9.10"		1,588.7"		
	30"	43.8"			43.8"		
		7,395.3"	7,226.8"		168.7"		28,897.26
		Balance December 31, 1921				4,438,700.1"	$11,059,681.02
1922	2"		132.6"		132.6"		
	3"		27.11"		27.11"		
Jan. to	4"	427.2"	8,211.2"		7,784.		
June	6"	3,884.11"	197.4"		3,687.7"		
	8"	3,202.9"	862.9"		2,340.		
	10"	56.6"			56.6"		
	12"		34.6"		34.6"		
	16"	583.7"			583.7"		
	30"		583.7"		583.7"		
		8,154.11"	10,049.9"		1,894.10"		18,561.32
		Balance June 30, 1922				4,436,805.3"	$11,078,242.34

Year	Size	Feet of Mains Laid	Mains Taken up or Abandoned	Purchased From N. Y. Mutual Gas Light Co.	Net Increase		
1922	3"		42.11"		42.11"		
July to	4"	135.6"	2,467.8"	316,667.	314,334.10"		
Dec.	5"						
	6"	2,924.7"	89,960.	375,470.	288,434.7"		
	8"	768.1"	9,761.	39,079.	30,086.1"		
	10"		107.6"	27,617.	27,509.6"		
	12"	3.9"	4,885.	27,010.	22,128.9"		
	16"	177.11"	452.	64,560.	64,285.11"		
	18"		23.		23.		
	20		1,765.6"	4,031.	2,265.6"		
	24"		216.	23,384.	23,168.		
	30"		1,915.5"	4,806.	2,890.7"		
	36			6,754.	6,754.		
		4,029.10"	111,616.	889,378.	781,791.10"		2,437,052.32
		Balance December 31, 1922				5,218,597.1"	$13,515,294.66

CONSOLIDATED GAS COMPANY OF NEW YORK
INVESTMENT IN STREET MAINS

Balance December 31, 1922					5,218,597.1"	$13,515,294.66
Year	Size	Feet of Mains Laid	Mains Taken up or Abandoned	Net Increase		
1923	3"		471.	471.		
Jan. to	4"	12.10"	2,468.3"	2,456.5"		
May	6"	1,387.1"	44.	1,343.1"		
	8"	834.9"		834.9"		
	10"		49.8"	49.8"		
	12"	1,677.11"		1,677.11"		
	16"	6.6"		6.6"		
	24"	4.7"		4.7"		
		3,923.8"	3,032.11"	890.9"		15,800.44
		Balance May 31, 1923			5,219,487.10"	$13,531,095.10
1923	3"		289.8"	289.8"		
June to	4"	126.6"	3,405.7"	3,279.1"		
Dec.	6"	4,041.4"	476.	3,565.4"		
	8"	331.	3.	328.		
	10"	254.10"	28.	226.10"		
	12"	155.5"	164.	8.7"		
	16"	14.		14.		
	18"	-		-		
	20"	163.8"	3.6"	160.2"		
	24"		2.	2.		
	30"		2.3"	2.3"		
		5,086.9"	4,374.	712.9"		26,783.20
		Balance December 31, 1923			5,220,200.7"	$13,557,878.30

Mains as of December 31, 1923

Size	Feet	Total	Cost
1½"	1,198.		
2"	4,341.8"		
3"	101,114.		
4"	650,042.9"		
5"	2,057.6"		
6"	2,549,552.6"		
8"	682,532.6"		
10"	88,098.		
12"	394,095.6"		
16"	168,590.		
18"	29,596.3"		
20"	210,257.1"		
24"	63,783.8"		
30"	167,309.11"		
36"	37,093.8"		
48"	70,537.7"	5,220,200.7"	$13,557,878.30

CONSOLIDATED GAS COMPANY OF NEW YORK

SERVICES

FROM DATE OF CONSOLIDATION TO

DECEMBER 31, 1923

CONSOLIDATED GAS COMPANY OF NEW YORK

INVESTMENT IN SERVICES

				Total	Cost
Services Acquired at Consolidation - Nov. 11th, 1884				90,299	$ 1,034,241.41
Year	Services Laid	Services Taken up or Abandoned	Net Increase		
Nov. 11/84 to Dec. 31/85	8,201	445	7,756		53,223.00
		Balance December 31, 1885		98,057	$ 1,087,464.41
1886	4,618	2,138	2,480		46,999.75
		Balance December 31, 1886		100,537	$ 1,134,464.16
1887	5,038	2,079	2,959		40,143.14
		Balance December 31, 1887		103,496	$ 1,174,607.30
1888	4,068	2,253	1,815		28,293.51
		Balance December 31, 1888		105,311	$ 1,202,900.81
1889	4,444	3,101	1,343		36,170.42
		Balance December 31st, 1889		106,654	$ 1,239,071.23
1890	6,184	4,801	1,383		43,766.26
		Balance December 31, 1890		108,037	$ 1,282,837.49
1891	6,200	6,516	316		37,738.81
		Balance December 31, 1891		107,721	$ 1,320,576.30
1892	4,877	11,758			[illegible]
		Balance December 31, 1892		100,840	$ 1,236,847.25
1893	4,056	4,095	39		8,784.85
		Balance December 31, 1893		100,801	$ 1,245,632.10
1894	3,617	2,697	920		11,122.76
		Balance December 31, 1894		101,721	$ 1,256,754.86
1895	3,821	2,845	976		18,090.22
		Balance December 31, 1895		102,697	$ 1,274,845.08
1896	3,658	3,171	487		12,609.89
		Balance December 31, 1896		103,184	$ 1,287,454.96
1897	4,445	4,305	140		18,503.35
		Balance December 31, 1897		103,324	$ 1,305,958.31
1898	5,535	5,107	428		[illegible].40
		Balance December 31, 1898		103,752	$ 1,305,904.85
1899	4,034	3,116	918		28,591.12
		Balance December 31, 1899		104,670	1,334,495.97
1900	1,788	2,110			9,665.5[illegible]
		Balance December 31, 1900		104,348	$ 1,341,161.5[illegible]
1901	1,046	3,401	[illegible]		
		Balance December 31, 1901		101,993	$ 1,33[illegible]7.16

3385

CONSOLIDATED GAS COMPANY OF NEW YORK

INVESTMENT IN SERVICES

Continued

Year	Services Laid	Services Taken up or Abandoned	Net Increase	Total	Cost
1902	1,863	6,143	4,280		35,803.15
		Balance December 31, 1902		97,713	$ 1,298,046.03
1903	1,278	7,252	5,974		61,501.27
		Balance December 31, 1903		91,739	$ 1,236,544.76
1904	1,415	4,469	3,054		14,712.93
		Balance December 31, 1904		88,685	$ 1,221,831.83
1905	2,745	4,921	2,176		396.54
		Balance December 31, 1905		86,509	$ 1,222,228.37
1906	2,667	3,754	1,087		15,111.17
		Balance December 31, 1906		85,422	$ 1,237,339.54
1907	2,670	4,027	1,342		53,820.72
		Balance December 31, 1907		84,073	$ 1,291,160.26
1908	3,667	5,746	2,079		15,426.85
		Balance December 31, 1908		81,994	$ 1,276,733.41
1909	2,862	4,947	2,085		1,407.58
		Balance December 31, 1909		79,909	$ 1,271,325.83
1910	2,680	4,896	2,216		4,111.35
		Balance December 31, 1910		77,693	$ 1,267,314.48
1911	3,196	5,403	2,205		8,121.64
		Balance December 31, 1911		75,488	$ 1,259,192.84
1912	4,061	6,624	2,543		275.21
		Balance December 31, 1912		72,945	$ 1,258,917.63
1913	3,187	4,674	1,487		8,158.87
		Balance December 31, 1913		71,458	$ 1,250,758.76
1914	1,429	2,245	816		31,785.87
		Balance December 31, 1914		70,642	$ 1,218,972.89
1915	1,111	2,051	940		572.35
		Balance December 31, 1915		69,702	$ 1,219,545.24
1916	1,127	2,140	1,013		1,695.49
		Balance December 31, 1916		68,689	$ 1,221,240.73
1917	697	946	249		13,491.10
		Balance December 31, 1917		68,440	$ 1,234,731.83
1918	1,076	1,531	455		37,509.91
		Balance December 31, 1918		67,985	$ 1,272,241.74

CONSOLIDATED GAS COMPANY OF NEW YORK

INVESTMENT IN SERVICES

Continued

Year	Services Laid	Services Taken up or Abandoned	Purchased from N. Y. Mutual Gas Light Co.	Net Increase	Total	Cost
1919	763	1,374		(611)		22,558.64
		Balance December 31, 1919			67,374	1,294,809.38
1920	1,229	1,958		(729)		71,392.38
		Balance December 31, 1920			66,645	1,366,192.76
1921	1,191	1,704		(513)		67,043.30
		Balance December 31, 1921			66,132	1,433,236.06
6 Mos. to 6/30/22	553	1,025		(472)		25,475.17
		Balance June 30, 1922			65,660	1,458,711.23
6 Mos. to 12/31/22	655	984	14,715	14,386		489,791.81
		Balance December 31, 1922			80,046	1,948,503.04
5 Mos. to 5/31/23	433	912		(479)		22,598.22
		Balance May 31, 1923			79,567	1,971,101.26
7 Mos. to 12/31/23	1,133	1,867		(734)		50,339.15
		Balance December 31, 1923			78,833	2,021,440.41

PLAINTIFF'S EXHIBIT NO.823

CONSOLIDATED GAS COMPANY OF NEW YORK

DX VALUE OF METERS AND MISCELLANEOUS INCLUDING

METERS

COCKS & CONNECTIONS

FURNITURE & FIXTURES

HORSES, WAGONS & HARNESS

TOOLS AND IMPLEMENTS

S C O W S

GAS APPLIANCES RENTED

AUTOMOBILES & ACCESSORIES

ORGANIZATION

OTHER INTANGIBLE CAPITAL

FROM DATE OF CONSOLIDATION TO

DECEMBER 31, 1923.

CONSOLIDATED GAS COMPANY OF NEW YORK
BOOK VALUE OF METERS AND MISCELLANEOUS

	Meters	Cocks and Connections	Furniture & Fixtures	Horses, Wagons, etc.	Tools and Implements	Scows	Gas Appliances Rented	Autos and Accessories	Total
Nov. 11, 1884	1,231,753.98	11,926.53	70,000.00	1,115.00	3,273.70	-	-	-	1,318,069.21
1885	180,006.47 (a)	27,980.58	11,310.71 (b)	26,030.00	4,807.51	-	-	-	57,500.91
Dec. 31, 1885	1,051,747.51	229,907.11	58,689.29	27,145.00	8,081.21	-	-	-	1,375,570.12
1886	53,695.23	23,092.34	13,451.25	882.50	1,481.89	-	-	-	65,690.71
Dec. 31, 1886	1,105,442.74	252,999.45	45,228.04	28,027.50	9,563.10	-	-	-	1,441,260.83
1887	85,769.94	26,198.74	75.50	744.50	3,286.47	-	-	-	116,075.15
Dec. 31, 1887	1,191,212.68	279,198.19	45,303.54	28,772.00	12,849.57	-	-	-	1,557,335.98
1888	73,168.45	19,985.11	383.50	1,264.50	2,607.75	-	-	-	97,409.31
Dec. 31, 1888	1,264,381.13	299,183.30	45,687.04	30,036.50	15,457.32	-	-	-	1,654,745.29
1889	67,276.45	14,928.90	427.50	1,765.00	2,182.40	-	-	-	86,580.25
Dec. 31, 1889	1,331,657.58	314,112.20	46,114.54	31,801.50	17,639.72	-	-	-	1,741,325.54
1890	61,144.75	16,777.80	447.50	3,473.63	6,273.21	-	-	-	88,116.89
Dec. 31, 1890	1,392,802.33	330,890.00	46,562.04	35,275.13	23,912.93	-	-	-	1,829,442.43
1891	48,342.30	19,028.96	693.95	5,225.50	3,919.17	-	-	-	77,209.88
Dec. 31, 1891	1,441,144.63	349,918.96	47,255.99	40,500.63	27,832.10	-	-	-	1,906,652.31
1892	59,270.20	17,296.97	1,282.70	2,893.50	3,164.88	-	-	-	83,908.25
Dec. 31, 1892	1,500,414.83	367,215.93	48,538.69	43,394.13	30,996.98	-	-	-	1,990,560.56
1893	44,052.25	21,132.42	2,074.11	1,709.70	1,372.99	-	-	-	77,341.47
Dec. 31, 1893	1,544,467.08	388,348.35	57,612.80	45,103.83	32,369.97	-	-	-	2,067,902.03
1894	54,854.55	16,731.42	591.55	200.00	2,532.68	-	20,671.95	-	95,582.15
Dec. 31, 1894	1,599,321.63	405,079.77	58,204.35	45,303.83	34,902.65	-	20,671.95	-	2,163,484.18
1895	100,756.96	24,281.00	640.75	288.00	8,825.62	-	24,678.20	-	159,470.43
Dec. 31, 1895	1,700,078.59	429,360.77	58,845.10	45,591.83	43,728.17	-	45,350.15	-	2,322,954.61
1896	90,878.21	648.46	45.10	2,7[illegible] .8	4,478.91	-	9,107.43	-	88,534.33
Dec. 31, 1896	1,790,956.80	430,009.23	50,000.00	37,858.25	48,[illegible]07.08	-	4,457.58	-	2,411,488.94
1897	102,291.65	11,146.[illegible]7	1,121.56	[illegible] .3	6,6[illegible].0	-	5,977.38	-	86,173.91
Dec. 31, 1897	1,893,248.45	418,862.66	51,121.56	32,424.42	41,570.80	-	60,434.96	-	2,497,662.85
1898	204,626.39	21,[illegible]17.07	9,[illegible]%	5,116.94)	662.34	-	62,455.36	-	230,556.32
Dec. 31, 1898	2,097,874.84	397,645.59	41,592.18	27,307.78	40,908.46	-	122,890.32	-	2,728,219.17
1899	202,828.10	4,110.63	7,019.11	4,670.88)	3,723.69	-	116,626.96	-	315,599.9
Dec. 31, 1899	2,300,702.94	401,756.22	34,573.07	22,636.90	44,632.15	-	239,517.28	-	3,043,816.56
1900	178,256.65	15,641.92	955.60	3,[illegible]4.18	3,055.45	-	32,901.46	-	194,531.85
Dec. 31, 1900	2,478,959.59	386,114.30	33,617.47	19,552.72	47,687.60	-	272,418.73	-	3,238,350.41
1901	90,294.75	28,551.75	[illegible].38	846.54	2,363.03	18,940.65	65,176.[illegible]	-	7,493.75
Dec. 31, 1901	2,569,254.34	357,562.55	28,814.09	18,706.18	45,324.57	18,940.65	207,241.78	-	3,245,844.16
1902	104,097.47	23,928.14	1,807.57	3,269.96	1,952.66	5,396.21	19,902.33	-	104,977.60
Dec. 31, 1902	2,673,351.81	333,634.41	27,006.52	21,976.14	43,371.91	24,336.86	227,144.11	-	3,350,821.76
1903	82,058.26	22,900.15	1,646.61	580.99	5,603.34	2,318.91	2,[illegible]3.12	-	58,618.80
Dec. 31, 1903	2,755,410.07	310,734.26	25,359.91	22,557.13	48,975.25	22,017.9	234,380.99	-	3,409,435.56
1904	76,264.47	15,241.72	8,114.01	1,074.90	647.59	2,201.80	11,6[illegible].53	-	57,005.82
Dec. 31, 1904	2,831,674.54	295,492.54	33,473.92	23,632.03	49,622.84	19,816.15	212,729.36	6,281.23	3,466,441.36
1905	145,874.84	11,354.[illegible]0	875.63	2,277.55	1,291.36	990.81	21,117.27		179,38[illegible].71
Dec. 31, 1905	$2,977,549.38	$284,138.04	$ 82,598.29	$21,354.48	$48,331.48	$ 18,826.34	$ 256,846.86	$ 6,281.23	$ [illegible] 45,925.09

(a) - Includes $202,629.57 transferred from Meter Account as of Dec. 31, 1885.
(b) - " " Plant Account as of Dec. 31, 1885.
24,722.00

CONSOLIDATED GAS COMPANY OF NEW YORK
BOOK VALUE OF METERS AND MISCELLANEOUS

	Meters	Cooks and Connections	Furniture & Fixtures	Horses, Wagons, etc.	Tools and Implements	Safes
Dec. 31, 1905	$2,977,549.38	$284,139.04	$ 32,598.29	$21,354.48	$ 48,331.48	$18,825.34
1906	194,154.64	3,829.30	2,698.38	(1,300.42)	7,894.12	(1,069.67)
Dec. 31, 1906	3,171,704.02	287,967.34	35,296.67	20,054.06	56,225.60	17,758.67
1907	111,540.21	13,979.47	3,769.09	1,659.41	19,671.89	(887.93)
Dec. 31, 1907	3,283,244.23	301,946.81	39,065.76	21,713.47	75,897.49	16,870.74
1908	88,083.89	(16,103.18)	(75.71)	629.52	4,411.73	(843.54)
Dec. 31, 1908	3,371,328.12	285,843.63	38,990.05	22,342.99	80,309.22	16,027.20
1909	50,075.06	472.54	17,967.76	1,463.71	4,539.42	-
Dec. 31, 1909	3,421,403.18	286,316.17	56,957.81	23,806.70	84,848.64	16,027.20
1910	53,276.38	5,139.94	26,942.54	6,985.67	19,057.64	-
Dec. 31, 1910	3,474,679.56	291,456.11	83,900.35	30,792.37	103,906.28	16,027.20
1911	61,877.52	2,674.91	38,818.70	(1, 34.63)	28,336.00	-
Dec. 31, 1911	3,536,557.08	294,131.02	122,719.05	29,857.74	132,242.28	16,027.20
1912	63,684.18	(5,191.23)	9,674.80	(4,627.31)	22,297.24	(206.00)
Dec. 31, 1912	3,600,241.26	288,939.79	131,393.85	24,930.43	154,539.52	15,821.20
1913	3,338.12	462.87	1,448.54	(3,807.65)	(1,004.26)	-
Dec. 31, 1913	3,603,579.38	289,402.66	132,842.39	21,122.78	153,535.26	15,821.20
1914	(6,945.10)	(4,604.59)	41,039.72	(6,215.91)	3,245.57	-
Dec. 31, 1914	3,596,634.28	284,798.07	173,882.11	14,906.87	156,780.83	15,821.20
1915	28,116.37	20,173.89	291,262.02	(1,148.85)	(8,068.31)	-
Dec. 31, 1915	3,624,750.65	304,971.96	465,144.13	13,758.02	148,712.52	15,821.20
1916	76,912.87	15,846.73	18,311.32	(7,607.17)	10,516.74	-
Dec. 31, 1916	3,701,663.52	320,818.69	483,455.45	6,150.85	159,229.26	15,821.20
1917	12,951.23	27,782.53	41,808.79	(104.19)	(2,824.63)	-
Dec. 31, 1917	3,714,614.75	348,601.22	525,264.24	6,046.66	156,404.63	15,821.20
1918	4,827.37	10,720.90	7,173.30	(298.66)	(7,069.37)	-
Dec. 31, 1918	3,719,442.12	359,322.12	532,437.54	5,747.80	149,335.26	15,821.20
1919	115,296.15	7,113.30	2,110.05	(591.00)	(5,016.69)	-
Dec. 31, 1919	3,834,738.27	366,435.42	534,547.59	5,156.80	144,318.57	15,821.20
1920	64,394.35	17,604.73	680.00	7,944.50	9,756.20	-
Dec. 31, 1920	3,899,132.62	384,040.15	535,227.59	13,101.30	154,074.77	15,821.20
1921	13,577.77	9,418.79	316.00	(1,677.70)	10,920.93	-
Dec. 31, 1921	3,912,710.39	393,458.94	535,543.59	11,423.60	164,995.70	15,821.20
six Months	22,969.35	3,825.18	944.22	(925.00)	13,090.09	-
June 30, 1922	3,935,679.74	397,284.12	536,487.81	10,498.60	178,085.79	15,821.20
six Months	397,862.87	38,676.20	24,981.02	737.75	15,801.95	(3,900.00)
Dec. 31, 1922	4,333,542.61	435,960.32	561,468.83	11,236.35	193,887.74	11,921.20
five Months	19,150.85	6,871.36	14,892.76	15.81	31,527.49	-
May 31, 1923	4,352,693.46	442,831.68	576,361.59	11,252.16	225,415.23	11,921.20
Seven Months	85,265.58	10,079.56	2,412.31	(1,366.15)	7,538.93	-
Dec. 31, 1923	$4,437,959.04	$452,911.24	$578,773.90	$9,886.01	$232,954.16	$11,921.20

CONSOLIDATED GAS COMPANY OF NEW YORK
BOOK VALUE OF METERS AND MISCELLANEOUS

	Gas Appliances Rented	Autos and Accessories	Organization	Other Intangible Capital	Total
Dec. 31, 1905	$ 256,846.85	$ 6,281.23	$ -	-	$3,645,925.09
1906	113,635.49	1,253.79	-	-	321,098.63
Dec. 31, 1906	370,482.34	7,535.02	-	-	3,967,025.72
1907	61,844.78	12,319.75	-	-	223,896.67
Dec. 31, 1907	432,327.12	19,854.77	-	-	4,190,920.39
1908	4,676.65	496.55	-	-	71,922.41
Dec. 31, 1908	427,650.27	20,351.32	-	-	4,262,842.80
1909	163,010.87	9,009.67	-	-	246,539.03
Dec. 31, 1909	590,661.14	29,360.99	-	-	4,509,381.83
1910	165,252.11	7,740.07	-	-	284,394.35
Dec. 31, 1910	755,913.25	37,101.06	-	-	4,793,776.18
1911	127,976.12	4,884.62	-	-	263,233.24
Dec. 31, 1911	883,889.37	41,985.68	-	-	5,057,109.42
1912	43,945.38	18,042.11	-	-	146,619.17
Dec. 31, 1912	927,834.75	60,027.79	-	-	5,203,728.59
1913	83,747.79	13,766.90	-	-	97,952.31
Dec. 31, 1913	1,011,582.54	73,794.69	-	-	5,301,680.90
1914	12,560.68	28,632.88	-	-	42,591.93
Dec. 31, 1914	999,021.86	102,427.61	-	-	5,344,272.83
1915	24,428.19	16,519.11	-	-	322,426.04
Dec. 31, 1915	974,593.67	118,946.72	-	-	5,666,698.87
1916	194,816.40	6,046.22	-	-	314,845.11
Dec. 31, 1916	1,169,410.07	124,992.94	-	-	5,981,541.98
1917	274,503.34	6,688.58	-	-	360,805.65
Dec. 31, 1917	1,443,913.41	131,681.52	-	-	6,342,347.63
1918	268,022.05	5,731.30	-	-	289,106.69
Dec. 31, 1918	1,711,935.46	137,412.82	-	-	6,631,454.32
1919	499,464.53	8,708.21	-	-	609,668.13
Dec. 31, 1919	2,211,399.99	128,704.61	-	-	7,241,122.45
1920	587,146.72	11,497.07	-	-	699,025.57
Dec. 31, 1920	2,798,546.71	140,203.68	-	-	7,940,148.02
1921	199,869.17	43,053.06	-	-	275,478.02
Dec. 31, 1921	2,998,415.88	183,256.74	-	-	8,215,626.04
Jan. - June	54,677.04	21,599.16	-	-	116,180.04
June 30, 1922	3,053,092.92	204,855.90	-	-	8,331,806.08
July - Dec.	450,607.25	13,150.83	168,596.13	1,009,970.00	2,116,484.00
Dec. 31, 1922	3,503,700.17	218,006.73	168,596.13	1,009,970.00	10,448,290.08
Jan. - May	2,932.58	14,834.14	122,343.51	-	212,568.50
June 1, 1923	3,506,632.75	232,840.87	290,939.64	1,009,970.00	10,660,858.58
June - Dec.	155,023.56	18,179.88	324,203.29	-	601,336.96
Dec. 31, 1923	$3,661,656.31	$251,020.75	$615,142.93	$1,009,970.00	$11,262,195.54

Distribution of Tax by Company

Applicable to Gas Business.....	32.05% of	216,493.00	69,386.01
Not applicable to Gas Business..	67.95% of	216,493.00	147,106.99
			216,493.00

(Here follow Plaintiff's Exhibits Nos. 818, 820, 821, 822, 823, marked side folio pages 2347 to 2391, inc.)

[fol. 2392] PLAINTIFF'S EXHIBIT No. 824

Schedule EE

Consolidated Gas Company of New York

Real Estate, Including Improvements Thereon Other Than Manufacturing Plant and Holder Stations, Not Claimed to be Used in the Gas Business

Sub-schedule 1—As of June 1, 1923
2—As of Dec. 31, 1923
3—As of Dec. 31, 1922
4—As of June 30, 1922

[fold 2393] Schedule EE-1

Consolidated Gas Company of New York

Real Estate, Including Improvements Thereon Other Than Manufacturing Plant and Holder Stations, Not Claimed to be Used in the Gas Business, as of June 1, 1923

14th Street Station:		
Block 980, Lot 26, Block 991, Lots 26, 50, taken by the City in Condemnation.....	$309,060.00	
Block 980, Lot 16—Sold	130,000.00	
	439,060.00	
Less Amount credited, per ledger, for sale of Block 980, Lot 16	180,000.00	
		$319,060.00
General Office Property—130 East 15th Street:		
Total Investment, as of June 1, 1923:		
Land (Per Schedule AA)	$517,658.98	
Building (Per Schedule AA)	2,620,680.52	
Total	$3,138,339.50	
Rented portion—61.80%—not claimed in the Gas Business..		1,939,493.81
17th Street Yard: Block 985, Lots 39, 40		12,000.00
18th Street Station: Block 715, Lot 59		67,500.00
21st Street Station:		
Block 952, Lots 33, 34	$23,000.00	
Block 978, Lot 1	20,286.73	
Block 978, Lots 2, 3	31,000.00	
Block 978, Lot 4	12,071.75	
		86,358.48

44th Street Station:

Block 1082, Lot 28	4,916.67	
Block 1082, Lots 38, 38½, 39	19,577.78	
Block 1082, Lot 1 (part), Block 1093, Lot 1 (part), Block 1107, Lots 23, 28, taken in condemnation by the City	840,032.08	
		864,236.83
111th Street Station: Block 1085, Lots 33 & 34		7,500.00
132nd Street Station: Block 1969, Lot 1—Apportionment of sidewalk improvements to portion sold		39.64
Forward		$3,296,178.46
[fol. 3294] Forward		$3,296,178.46
Inwood Station: Block 2175, Lots 15, 18, 22, 100 & 124		21,700.00
Avenue A & 60th Street: Block 1474, Lot 24		22,000.00
222-228 West 65th Street: Block 1156, Lots 45 & 46		134,414.98
East 132nd Street & Locust Avenue Block 2583, Lot 300		90,451.75
193th Street and Audubon Avenue: Block 2123, Lots 48 to 51		50,344.80
Kent Avenue, Brooklyn: Block 2184, Lot 1		77,931.18
Assessments for Local Improvements Applicable to property not claimed		83,842.88
Total		$3,791,930.95

[fol. 3295] Schedule EE-2

Consolidated Gas Company of New York

Real Estate, Including Improvements Thereon Other Than Manufacturing Plant and Holder Stations, Not Claimed to be Used in the Gas Business, as of December 31, 1923

General Office Property—130 East 15th Street:

Total Investment as of December 31, 1923:

Land (Per Schedule AA)	$517,658.98	
Building (Per Schedule AA)	2,622,291.35	
Total	$3,139,950.33	
Rented portion—61.80%—not claimed in the Gas Business		$1,940,489.30
17th Street Yard: Block 985, Lots 39, 40		12,000.00
18th Street Station: Block 715, Lot 59		67,500.00

21st Street Station:

Block 962, Lots 33, 34	$23,000.00	
Block 978, Lot 1	20,286.73	
Block 978, Lots 2, 3	31,000.00	
Block 978, Lot 4	12,071.75	
		86,358.48
42nd Street Station: Block 1090, Lot 23		60,000.00

44th Street Station:

Block 1082, Lot 28	$4,016.67	
Block 1082, Lots 38, 38½, 39	19,577.78	
Block 1082, Lot 1 (part), Block 1083, Lot 1, (part), Block 1107, Lots 23, 28, taken in condemnation by the City	840,632.08	
		$864,226.53
111th Street Station: Block 1083, Lots 34 & 35		7,500.00
132nd Street Station: Apportionment of sidewalk improvements to portion sold		39.64
Inwood Station: Block 2175, Lots 15, 18, 22, 100, 124		21,706.90
Avenue A & 60th Street: Block 1474, Lot 24		22,000.00
Forward		$3,081,880.85

[fol. 3396] Forward $3,081,880.85
222-228 West 65th Street: Block 1156, Lots 45, 46 134,414.98
193th Street & Audubon Avenue: Block 2123, Lots 48-51 50,344.80
Kent Avenue, Brooklyn: Block 2184, Lot 1 77,931.18
Assessments for Local Improvements Applicable to property not claimed 77,794.02
Total $3,428,365.83

[fol. 3397] Schedule EE-3

Consolidated Gas Company of New York

Real Estate, Including Improvements Thereon Other Than Manufacturing Plant and Holder Stations, Not Claimed to be Used in the Gas Business, as of December 31, 1922

14th Street Station:

Block 989, Lot 26, Block 991, Lots 28, 50, taken in condemnation by the City	309,050.00	
Block 989, Lot 16—Sold	130,000.00	
	$499,050.00	
Less Amount credited, per ledger, for sale of Block 989, Lot 16	180,000.00	
		$319,050.00

General Office Property—130 East 15th Street:

Total Investment as of Dec. 31, 1922:

Land (Per Schedule AA)	$517,658.98	
Building (Per Schedule AA)	2,620,680.52	
Total	$3,138,339.50	
Rented portion—64.8+%—not claimed in the gas business		2,034,869.33
17th Street Yard: Block 985, Lots 39, 40		12,000.00
18th Street Station; Block 690, Lot 40, Block 715, Lot 59		75,000.00

21st Street Station:		
Block 952, Lots 33, 34	$23,000.00	
Block 978, Lot 1	20,286.73	
Block 978, Lots 2, 3	31,000.00	
Block 978, Lot 4	12,071.75	
		86,358.48
44th Street Station:		
Block 1092, Lot 1 (part), Block 1093, Lot 1 (part), Block 1107, Lots 23, 28, taken in condemnation by the City	840,632.08	
Block 1092, Lot 7 (part), & 28—Rented	45,566.96	
Block 1092, Lots 38, 38½, 39—Rented	19,577.78	
		905,776.82
111th Street Station: Block 1683, Lots 34 & 35		7,500.00
132nd Street Station: Apportionment of sidewalk improvements to portion sold		39.64
Forward		$3,440,634.27
[fol. 3398] Forward		$3,440,634.27
Inwood Station: Block 2175, Lots 15, 18, 22, 100, 124		21,766.90
Avenue A and 60th-61st Streets: Block 1455, Lot 13, Block 1474, Lot 24		88,300.55
222-228 West 65th Street: Block 1156, Lots 45, 46		134,414.98
East 132nd Street & Locust Avenue: Block 2583, Lot 300		99,451.75
106th Street and Audubon Avenue: Block 2123, Lots 48-51		56,344.80
Kent Avenue, Brooklyn: Block 2184, Lot 1		77,931.18
Assessments for Local Improvements Applicable to property not claimed		85,351.39
Total		$4,004,395.82

[fol. 3399]

Schedule EE-4

Consolidated Gas Company of New York

Real Estate, Including Improvements Thereon Other Than Manufacturing Plant and Holder Stations, Not Claimed to be Used in the Gas Business, as of June 30, 1922, deducted by the Public Service Commission in the Investment of the Company in the Gas Business, as of June 30, 1922, Upon Which the said Commission Based Its Order of August 30, 1922, in Case No. 79.

14th Street Station:		
Block 989, Lot 26, and Block 991, Lots 26, 50, condemned by the City	$369,060 00	
Block 989, Lot 16—Sold	130,000 00	
Block 985, Lots 39, 40—Rented	12,000 00	
		$511,060 00

Less amount credited, per ledger, for Block 989, Lot 16, above	180,000 00	
		$331,060 00
18th Street Station: Block 690, Lots 12, 40, 42-45, 48-53, and Block 715, Lot 59		200,472 55
21st Street Station: Tenement Properties—Block 952, Lots 33, 34, and Block 978, Lots 1-4		86,358 48
44th Street Station: Block 1092, Lot 1, Block 1093, Lot 1, and Block 1107, Lots 23, 28, condemned by the City; and Block 1092, Lots 7 (part), 28, 38, 38½, 39, rented		925,140 36
111th Street Station: Block 1683, Lots 33, 34		7,500 00
132nd Street Station: Apportionment of "sidewalks" not claimed		39 64
Inwood Station: Block 2175, Lots 15, 18, 22, 100, 124		21,766 90
Avenue A and 60th-61st Street—Rented Block 1455, Lot 13, and Block 1474, Lot 24		88,300 55
222-228 West 65th Street—Rented Block 1156, Lots 45, 46		134,414 98
166th Street and Audubon Avenue Block 2123, Lots 48-51		56,344 80
Forward		$1,851,398 26
[fol. 3400] Forward		$1,851,398 26
Kent Avenue, Brooklyn: Block 2184, Lot 1		77,931 18
Assessments for Local Improvements Applicable to Property not claimed		90,159 48
Total		$2,019,488 92

[fol. 3401] PLAINTIFF'S EXHIBIT No. 825

Schedule FF

Consolidated Gas Company of New York

Manufacturing Plant and Holder Stations Not Claimed to be Used in the Gas Business

Sub-schedule 1—As of June 1, 1923
2—As of Dec. 31, 1923
3—As of Dec. 31, 1922
4—As of June 30, 1922

[fol. 3402] Schedule FF-1

Consolidated Gas Company of New York

Manufacturing Plant & Holder Stations Not Claimed to be Used in the Gas Business as of June 1, 1923

14th Street Station: Plant located on Block 989 Lot 26 and Block 991 Lot 26, condemned by the City	91,360 49
18th Street Station: Plant not claimed in the Gas Business	46,317 79
44th Street Station: Plant located on Block 1092 Lot 1 (part), Block 1093 Lot 1 (part), and Block 1107 Lots 23, 28, taken in condemnation by the City, or dismantled as a result thereof	1,171,965 08
East 132nd St. Testing Station: Plant not claimed in the Gas Business	7,450 00
Inwood Station: Plant not claimed in the Gas Business	4,293 90
Engineering & Superintendence: Portion of services of Engineers during the period from Jan. 1 to May 31, 1923 applicable to Affiliated Companies, (included in amount billed in 1924). Total Services of Engineers (per Sch. BB) $43,583 78. Applicable to Affiliated Companies—61.22%	26,681 99
Total	1,348,069 25

[fol. 3403] Schedule FF-2

Consolidated Gas Company of New York

Manufacturing Plant & Holder Stations Not Claimed to be Used in the Gas Business as of December 31, 1923

18th Street Station: Plant not claimed in the Gas Business	46,317 79
42nd Street Station: Plant located on Block 1090 Lot 23, not claimed in the Gas Business after October 31, 1923	1,036 00
44th Street Station: Plant located on Block 1092 Lot 1 (part), Block 1093 Lot 1 (part) Block 1107 Lots 23, 28, taken in condemnation by the City, or dismantled as a result thereof	1,171,965 08
Inwood Station: Plant not claimed in the Gas Business	4,293 90
Engineering & Superintendence: Portion of services of Engineers during the year 1923 applicable to Affiliated Companies billed in 1924	62,059 65
Total	1,285,672 42

[fol. 3404] Schedule FF-3

Consolidated Gas Company of New York

Manufacturing Plant & Holder Stations Not Claimed to be Used in the Gas Business, as of December 31, 1922

14th Street Station: Plant located on Block 989 Lot 26 and Block 991 Lot 26, condemned by the City	91,360 49
18th Street Station: Plant not claimed in the Gas Business	46,317 79
44th Street Station: Plant located on Block 1092 Lot 1 (part) Block 1093 Lot 1 (part), Block 1107 Lots 23, 28, taken in condemnation by the City, or dismantled as a result thereof	1,171,965 08

East 132nd Street Testing Station: Plant not claimed in the Gas Business	7,450 00
Inwood Station: Plant not claimed in the Gas Business	4,293 90
Engineering & Superintendence: Portion of Services of Engineers during the year 1922 billed to Affiliated Companies in 1923 (per Schedule BB)	62,201 67
Total	1,383,588 93

[fol. 3405] Schedule FF-4

Consolidated Gas Company of New York

Investment in Manufacturing Plant and Holder Stations Not Claimed to be Used in the Gas Business, as of June 30, 1922, Deducted by the Public Service Commission in the Investment of the Company in the Gas Business, as of June 30, 1922, Upon Which the said Commission Based Its Order of August 30, 1922, in Case No. 79.

14th Street Station: Plant located on Block 989 Lot 26 and Block 991 Lot 26, condemned by the City of New York	$91,360 49
18th Street Station: Plant not claimed in the Gas Business	46,626 60
44th Street Station: Plant located on Block 1092 Lot 1 (part), Block 1093 Lot 1 (part), and Block 1107 Lots 23, 28, taken in condemnation by the City, or dismantled as a result thereof	1,290,412 67
Inwood Station: Plant not claimed in the Gas Business	4,293 90
Total	$1,432,693 66

[fol. 3406] PLAINTIFF'S EXHIBITS NOS. 826 AND 827

Consolidated Gas Company of New York

Working Capital, 1922-1923

[fol. 3407] Exhibit 826

Consolidated Gas Company of New York

Working Capital Necessary in the Gas Business, Exclusive of Accounts Receivable from Affiliated Gas & Electric Companies, for the Year Ended December 31, 1923

1923	Necessary average cash	Accounts receivable, gas, exclusive of amounts due from affiliated companies	Material and supplies, gas	Total
January 31....	$2,000,000	$2,225,564.30	$1,499,664.54	$5,725,228.84
February 28...	2,000,000	2,663,320.93	1,405,132.21	6,068,453.14
March 31	2,000,000	3,390,068.75	1,415,311.95	6,805,380.70
April 30	2,000,000	2,716,713.43	1,465,259.57	6,181,973.00
May 31	2,000,000	2,437,378.30	1,599,436.30	6,036,814.60
June 30.....	2,000,000	1,900,349.05	1,741,230.64	5,641,579.69
July 31	2,000,000	1,658,897.73	1,813,771.82	5,472,669.55
August 31.....	2,000,000	1,531,871.63	1,949,981.58	5,481,853.21
September 30..	2,000,000	1,619,239.66	1,862,832.75	5,482,072.41
October 31	2,000,000	1,775,581.38	1,764,408.11	5,539,991.49
November 30 ..	2,000,000	2,132,256.37	1,618,356.48	5,750,612.85
December 31 ..	2,000,000	2,197,673.27	1,673,773.09	5,871,446.36
Total ...	$24,000,000	$26,248,916.80	$19,809,159.04	$70,058,075.84
Average	$2,000,000	$2,187,409.74	$1,650,763.25	$5,838,172.99
Gas delivered but not billed (average)				1,385,084.79
Total Working Capital in the gas business.....				$7,223,257.78
Say				$7,200,000.00

[fol. 3408] **Exhibit 827**

Consolidated Gas Company of New York

Working Capital Necessary in the Gas Business, Exclusive of Accounts Receivable from Affiliated Gas & Electric Companies, for the Year Ended December 31, 1922

1922	Necessary average cash	Accounts receivable, gas, exclusive of amounts due from affiliated companies	Material and supplies, gas	Total
January 31....	$2,000,000	$1,825,143.42	$1,661,306.84	$5,486,450.26
February 28...	2,000,000	1,972,738.17	1,062,862.96	5,035,601.13
March 31	2,000,000	2,085,931.02	1,693,382.49	6,389,313.51
April 30.....	2,000,000	2,280,516.91	1,644,512.18	5,925,029.09
May 31	2,000,000	1,752,024.18	1,607,621.11	5,359,645.29
June 30.....	2,000,000	1,448,666.00	1,601,883.32	5,050,549.32
July 31	2,000,000	1,413,657.23	1,586,366.27	5,000,023.50
August 31.....	2,000,000	1,312,293.65	1,809,741.24	5,122,034.89
September 30..	2,000,000	1,405,180.01	1,738,329.60	5,143,509.61
October 31	2,000,000	1,613,758.56	1,671,555.08	5,285,313.64
November 30 ..	2,000,000	1,887,101.81	1,554 147.28	5,441,249.09
December 31 ..	2,000,000	2,200,317.36	1,576,551.18	5,776,868.54
Total ..	$24,000,000	$21,807,328.32	$19,808,259.55	$65,615,587.87
Average	$2,000,000	$1,817,277.36	$1,650,688.30	$5,467,965.66
Gas delivered but not billed (average).....				1,308,992.88
Total Working Capital in the the gas business.....				$6,776,958.54
Say				$6,775,000.00

[fol. 3409] PLAINTIFF'S EXHIBIT No. 828

Consolidated Gas Company of New York

Summary of the Cost of the Company's Property Claimed to be Used in the Gas Business, Exclusive of Expenditures Made, But Not Charged to Fixed Capital, for Interest During Construction, Engineering and Superintendence, and Other Overheads, and of "Going Value"

As of June 1, 1923
As of Dec. 31, 1923
As of Dec. 31, 1922
As of June 30, 1922

[fol. 3410] **Consolidated Gas Company of New York**

Summary of the Original Cost of the Company's Property Claimed to be used in the Gas Business as of June 1, 1923, Exclusive of Expenditures Made, but not Charged to Fixed Capital, for Interest During Construction, Engineering & Superintendence, and Other Overheads, and of "Going Value"

Real Estate—Per Schedule AA	$14,597,479.43	
Less that not claimed to be used in the Gas Business—Per Schedule EE-1	3,791,930.95	$10,805,548.48

Manufacturing Plant and Holder Stations—Per Schedule BB	17,540,088.52	
Less that not claimed to be used in the Gas Business—Per Schedule FF-1	1,348,089.25	
		16,191,999.27
Street Mains—Per Schedule CC		13,531,095.10
Services —Per Schedule CC		1,971,101.26
Meters —Per Schedule DD	4,352,693.46	
Cocks & Connections — "	442,831.68	
Furniture & Fixtures — "	576,361.59	
Horses, Wagons & Harness— "	11,252.16	
Tools & Implements — "	225,415.23	
Scows — "	11,921.20	
Gas Appliances Rented — "	3,506,632.75	
Automobiles & Accessories— "	232,840.87	
Organization — "	290,939.64	
Other Intangible Capital— "	1,009,970.00	
		10,660,858.58
Total		53,160,602.69
Less that portion of jointly used property used by others (for facilities comprised within the report of George E. Woods, dated Dec. 18, 1923—Exhibit No. 766)		1,783,239.25
		51,377,363.44
Franchises & Rights (212 U. S. 19; 267 Fed. 231, Affd., 258 U. S. 165)		7,781,000.00
Working Capital		7,200,000.00
Total		$66,358,363.44

[fol. 3411] Consolidated Gas Company of New York

Summary of the Original Cost of the Company's Property Claimed to be used in the Gas Business as of December 31, 1923, Exclusive of Expenditures Made, but not Charged to Fixed Capital, for Interest During Construction, Engineering & Superintendence, and Other Overheads, and of "Going Value"

Real Estate—Per Schedule AA	$14,536,894.00	
Less that not claimed to be used in the Gas Business—Per Schedule EE-2	3,428,365.83	
		$11,108,528.17
Manufacturing Plant and Holder Stations—Per Schedule BB	17,987,680.22	
Less that not claimed to be used in the Gas Business—Per Schedule FF-2	1,285,672.42	
		16,702,007.80
Street Mains—Per Schedule CC		13,557,878.30
Services —Per Schedule CC		2,021,440.41
Meters —Per Schedule DD	4,437,959.04	
Cocks & Connections — "	452,911.24	
Furniture & Fixtures — "	578,773.90	
Horses, Wagons & Harness— "	9,886.01	
Tools & Implements — "	232,954.16	
Scows — "	11,921.20	
Gas Appliances Rented — "	3,661,656.31	
Automobiles & Accessories— "	251,020.75	
Organization — "	615,142.93	
Other Intangible Capital— "	1,009,970.00	
		11,262,195.54
Total		54,652,050.22

Less that portion of jointly used property used by others (for facilities comprised within the report of George E. Woods, dated Dec. 18, 1923—Exhibit No. 706)		1,783,239.25
		32,808,810.97
Franchises & Rights (212 U. S. 19; 207 Fed. 231, Affd. 258 U. S. 165)		7,781,000.00
Working Capital		7,280,000.00
Total		$867,849,810.97

[fol. 3412] Consolidated Gas Company of New York

Summary of the Original Cost of the Company's Property Claimed to be Used in the Gas Business as of December 31, 1922, Exclusive of Expenditures Made, but not Charged to Fixed Capital, for Interest During Construction, Engineering & Superintendence, and Other Overheads, and of "Going Value"

Real Estate—Per Schedule AA	$14,508,340.24	
Less that not claimed to be used in the Gas Business—Per Schedule EE3	4,004,205.82	
		$10,504,120.42
Manufacturing Plant and Holder Stations—Per Schedule BB	17,474,216.11	
Less that not claimed to be used in the Gas Business—Per Schedule FF3	1,793,588.93	
		16,680,627.18
Street Mains—Per Schedule CC		13,515,294.66
Services —Per Schedule CC		1,948,503.04
Meters —Per Schedule DD	4,333,542.61	
Cocks & Connections — "	495,909.32	
Furniture & Fixtures — "	561,408.83	
Horses, Wagons & Harness— "	11,236.35	
Tools & Implements — "	103,887.74	
Scows — "	11,921.20	
Gas Appliances Rented — "	3,503,700.17	
Automobiles & Accessories— "	218,006.73	
Organization — "	168,506.13	
Other Intangible Capital — "	1,000,970.00	
		10,448,290.08
Total		52,596,835.38
Less that portion of jointly used property used by others (for facilities comprised within the report of George E. Woods, dated Dec. 19, 1922—Exhibit No. 705)		3,281,037.06
		49,225,798.32
Franchises & Rights (212 U. S. 19; 207 Fed. 231, Affd. 258 U. S. 165)		7,781,000.00
Working Capital		6,775,000.00
Total		$63,781,798.32

[fol. 3413] Consolidated Gas Company of New York

Summary of the Original Cost of the Company's Property Claimed to be Used in the Gas Business as of June 30, 1922, Exclusive of Expenditures Made, but not Charged to Fixed Capital, for Interest During Construction, Engineering & Superintendence, and Other Overheads, and of "Going Value," Upon Which the Public Service Commission Based Its Order of August 30, 1922, in Case No. 79.

Real Estate—Per Schedule AA	$12,836,698.74	
Less that not claimed to be used in the Gas Business—Per Schedule EE-4	2,010,488.92	
		$10,816,009.82
Manufacturing Plant and Holder Stations—Per Schedule BB	13,939,081.81	
Less that not claimed to be used in the Gas Business—Per Schedule FF-4	1,432,693.66	
		12,506,388.15
Street Mains—Per Schedule CC		11,078,242.34
Services —Per Schedule CC		1,458,711.23
Meters —Per Schedule DD	3,935,679.74	
Cocks & Connections — "	397,284.12	
Furniture & Fixtures — "	536,487.81	
Horses, Wagons & Harness— "	10,498.60	
Tools & Implements — "	178,085.79	
Scows — "	15,821.20	
Gas Appliance Rented — "	3,053,092.92	
Automobiles & Accessories— "	204,855.10	
		8,331,806.08
Total		44,191,757.62
Franchises & Rights (212 U. S. 19; 207 Fed. 231, Affd. 238 U. S. 165)		7,781,000.00
Working Capital (Amount proven in prior suit, per Pltf's Ex. 98, adopted by the Commission)		4,625,000.00
Total Investment, as of June 30, 1922 found by the Public Service Commission		$56,597,757.62

[fol. 3414] PLAINTIFF'S EXHIBIT No. 829

Astoria Light, Heat & Power Company

Investment in Fixed Capital, January, 1899, to December, 1923, Inclusive

[fol. 3415] Year	Additions	Withdrawals	Net additions	Balance Dec. 31st
1899	$8053,953.75		$8053,953.75	$8053,953.75
1900	66,101.00		66,101.00	1,020,054.75
1901	43,953.61		43,953.61	1,064,008.36
1902	37,749.72		37,749.72	1,101,758.08
1903	387,051.51		387,051.51	1,488,809.59
1904	2,268,991.07		2,268,991.07	3,757,745.66
1905	2,130,780.00		2,130,780.00	5,888,525.75
1906	2,447,217.49		2,447,217.49	8,335,743.24
1907	2,164,336.77	87,287.83	2,157,048.94	10,492,792.18
1908	644,749.37	29,752.47	614,996.90	11,107,789.08
1909	554,830.79	12,904.26	541,926.53	11,649,715.61
1910	841,293.65	14,648.27	826,645.38	12,476,360.99
1911	2,338,181.47	1,421,264.41	916,917.06	13,393,278.05
1912	1,914,742.61	83,259.17	931,483.44	14,324,761.49
1913	302,089.12	39,232.00	262,857.22	14,587,618.71
1914	202,221.38	22,835.81	179,387.57	14,767,006.28
1915	120,525.23	23,887.92	95,637.31	14,862,643.59
1916	165,280.79	57,685.95	107,594.84	14,970,238.43
1917	156,670.93	38,110.61	118,560.32	15,088,804.75
1918	174,627.84	20,799.02	153,828.82	15,242,633.57
1919	300,982.94	30,046.15	270,646.79	15,522,280.36
1920	4,812,471.73	45,079.48	4,767,392.25	20,289,672.61
1921	4,624,770.90	33,288.93	4,591,487.97	24,881,160.58
Jan.-July, 1922	612,618.63	1,690.00	610,928.63	25,492,089.21
July-Dec., 1922	1,008,777.75	175,639.46	803,138.29	26,385,227.50
Jan.-May, 1923	751,578.21	1,716.50	749,861.71	27,135,089.21
June-Dec., 1923	708,526.91	29,558.55	678,968.36	27,814,057.57
	$29,912,735.26	$2,098,677.69	$27,814,057.57	

[fol. 3416] The Astoria Light, Heat and Power Company

Original Cost of Fixed Capital Employed in the Gas Business as of December 31, 1923

[fol. 3417] General:

Real Estate	$1,227,997 85
Assessments	33 46
Improvements on Real Estate	1,483,338 70
Luyster Creek Bulkhead	950,679 21
North Shore Dock—Interior Crib	193,429 20
East River Crib Bulkhead	51,979 08
North Shore Crib Bulkhead	214,318 95
North Shore Buoys	33 00
North Shore Trestle	13,287 02

Crib Dock Extension—Old Dock	2,494 92
Repairs to Docks & Sea Walls During Construction	3,601 34
Outshore Crib—Berrian's Island	4,213 54
Street Mains	2,680 40
Gas Appliances on Rental	9 68
Meters & Connections	116 53
Services	400 10
Office Furniture & Fixtures	11,741 94
Horses, Wagons and Harness	3,326 06
Automobiles & Accessories	17,570 73
Tools & Implements	86,905 10
Boats & Scows	41,604 92
Electric Power House	117,555 90
Electric Power House Contents	279,719 54
Shop & Office Building	88,610 45
Shop & Office Building Contents	73,606 62
Steel Storage Sheds	40,712 21
General Electric Distribution System	209,233 33
Mess Hall	65,678 63
Mess Hall Contents	24,005 70
Steel Storage Building No. 3	18,792 02
Terra Cotta Storage Tanks	700 00
Wash and Locker House	27,710 66
Wash and Locker House Contents	12,663 31
Paint and Oil Storage Building	300 00
Railroad	472,964 22
Railroad Equipment—Narrow Gauge	42,918 50
Railroad Equipment—Standard Gauge	268,338 17
Permanent Fresh Water System	154,628 33
North Shore Pump House	5,073 10
North Shore Pump House Contents	9,227 64
Crushing and Grinding Plant	3,314 32
Experimental Benzol Enrichment Plant	937 87
Rigger's Loft	4,704 42
Launch Tenders Store House—Section 1 Dock	460 11
Fire Brick Shed No. 2	36,932 95
Oil Storage Tanks—East River Dock	1,443 40
Laboratory	38,745 13
Forward	$6,307,838 35

[fol. 3418] Forward	$6,307,838 35
Laboratory Contents	23,306 38
Observation Towers & Equipment	6,164 52
Paint Shop	6,184 53
Oxide Yard	29,870 12
Storage Holder No. 1	923,413 62
Storage Holder No. 2	1,253,593 80
Main Gate House & Gate	6,886 26
Hose Houses	102 33
Luyster Creek Coal Handling Plant	830,797 91
Plant "A":	
Inclined Retort House	417,615 23
Inclined Retort House Contents	1,198,022 54
West Tar Extractor and Washer House	35,216 78
West Tar Extractor and Washer House Contents	146,371 36
West Condenser House	26,571 98
West Condenser House Contents	87,360 77
West Purifier House	123,049 69
West Purifier House Contents	215,374 10
Coal Hdlg. App. Adjacent to Inclined Ret. Hse	75,307 44
Coke Hdlg. App. Adjacent to Inclined Ret. Hse	43,626 01
Plant "B":	
Horizontal Retort House	304,645 69
Horizontal Retort House Contents	1,182,914 26
East Tar Extractor and Washer House	34,789 85
East Tar Extractor and Washer House Contents	149,461 27
East Condenser House	26,263 91
East Condenser House Contents	87,379 39
East Purifier House	156,629 02
East Purifier House Contents	212,714 78
Coal Hdlg. App. Adj. to Horiztl. Ret. Hse.	113,146 27
Coke Hdlg. App. Adj. to Horiztl. Ret. Hse.	79,874 26

Plants "A" & "B":

Boiler House	21,906 24
Boiler House Contents	47,106 90
Chimney for Boiler House	4,921 53
Exhauster House	26,372 18
Exhauster House Contents	60,606 28
Meter House	22,837 82
Meter House Contents	45,492 84
Tar Tanks Underground	23,408 92
Ammonia Tanks Underground	51,498 64
Cyanogen Plant	35,371 30
General Connections	175,798 87
Sulphate of Ammonia Plant Buildings	140,603 19
Sulphate of Ammonia Plant Contents	235,919 47
Coal Handling Apparatus—Coal Unldg. Towers	183,987 95
Coal Handling Apparatus—Coal Storage Bridge	206,899 81
Coke Handling Apparatus—Coke Delivery System	23,237 89
Tar Tanks Overground	6,420 94
Forward	$15,416,883 19

[fol. 3419] Forward $15,416,883.19

Plants "A" & "B" Continued:

Ammonia Tanks Overground	5,675.46
Nap-thalene Tanks Adj. to Washer House	2,496.56
Woods' Condenser	2,186.28
Coal Grinding and Sampling House	1,405.18
Tar Storage Tanks Overground No. 5	6,968.39
Storage Tanks Adj. to Sulphate Plant	17,037.08
Scrubber Towers Adj. to A and B Plants	7,055.56
Pump House Adj. to A and B Plants	500.00

Plant "C":

Generator House	189,398.63
Generator House Contents	715,400.32
Shaving Scrubbers	29,659.57
Tar Extractor House	12,426.62

Tar Extractor House Contents	13,068.62
Purifiers	182,875.74
Condensers	78,628.62
Relief Holder	114,383.77
Coal Hdlg. App. North of Gener. Hse.	183,723.00
Pump House Adjacent to "C" Plant	500.00
Scrubber Towers Adjacent to "C" Plant	7,055.57
Plant "D":	
Generator House	781,340.12
Generator House Contents	2,024,559.20
Shaving Scrubbers	93,417.90
Tar Extractor House	48,995.40
Tar Extractor House Contents	65,522.34
Fuel Hdlg. App. Adj. to Gener. House	317,615.00
Ash Hldg. App. Adj. to Gener. House	270,594.54
Purifiers	925,304.90
Condensers	366,877.41
Relief Holder	310,215.27
Emulsion Separating Tank	20,187.06
Tar Tanks	8,015.47
Plants "C" & "D":	
Exhauster House	48,706.71
Exhauster House Contents	240,680.62
Boiler House No. 1	38,355.25
Boiler House No. 1 Contents	97,799.29
Boiler House No. 1 Chimneys	12,838.03
Pump House	51,555.89
Pump House Contents	94,454.13
Meter House	48,087.23
Meter House Contents	251,919.95
Separators	113,671.27
General Connections	549,868.62
Boiler House No. 2	141,372.55
Boiler House No. 2 Contents	382,738.73
Boiler House No. 2 Chimneys	36,494.33
Tar Tanks Overground	7,880.19
Tar Storage Tank Overground No. 7	7,080.45
Forward	$24,343,476.01

[fol. 3420] Forward	$24,343,476.01
Plants "C" & "D" continued:	
Photometer and Calorimeter House	13,309.55
Photometer and Calorimeter House Contents	17,618.66
Oil Tanks	350,018.83
Oil Pump House—Section F Bulkhead	3,644.42
Oil Pump House—Section F Bulkhead Contents	12,245.51
Oil Pump House Contents	24.94
Drip Oil Separating Tank	3,671.25
Miscellaneous:	
Engineering Department	834,158.23
Organization	47,552.75
Temporary Structures	21,413.37
Temporary Structures Demolished	30,606.49
Hoisting Apparatus	10,056.27
Temporary Railroad	9,707.49
Demolishing Buildings	1,164.25
Citizens' Mutual Franchise	50,000.00
Interest during Construction—as of Dec. 31, 1908	997,301.79
Interest during Construction—Since Dec. 31, 1908	284,662.76
Insurance during Construction	30,996.29
Taxes during Construction	67,565.45
Legal Expense during Construction	28,601.24
Stable Expense during Construction	9,532.95
General Expense during Construction	29,114.09
Sundry Expense during Construction	381,933.19
Office Expense during Construction	119,253.98
Repairs to Temporary Structures during Const.	3,849.49
Repairs to Temporary Railroad and Eq. during Const.	9,123.20
Repairs to Railroad and Equipment during Const.	28,566.93
Repairs to Hoisting Apparatus during Const.	4,677.73
Repairs to Buildings during Construction.	8,309.95

Repairs to Tools & Implements during Construction	52,696.96
Repairs to Boats and Scows during Construction	4,475.39
Repairs to Permanent Fresh Water System during Const	1,358.96
Repairs to Water Plant and Mains during Const.	3,369.20
Total	$27,814,057.57
Less two-thirds of the original cost of Luyster Creek Coal Handling Plant and Storage Facilities, devoted to the use of the New York Edison Company	1,256,535.01
	$26,557,522.56

[fol. 3421] The Astoria Light, Heat and Power Company

Original Cost of Fixed Capital Employed in the Gas Business as of June 1, 1923

[fol. 3422] General:

Real Estate	$1,227,997.85
Assessments	32.53
Improvements on Real Estate	1,418,283.40
Luyster Creek Bulkhead	829,659.44
North Shore Dock—Interior Crib	193,429.20
East River Crib Bulkhead	51,979.08
North Shore Crib Bulkhead	197,871.14
North Shore Buoys	33.00
North Shore Trestle	13,287.02
Crib Dock Extension—Old Dock	2,494.92
Repairs to Docks & Sea Walls During Construction	3,601.34
Outshore Crib—Berrian's Island	4,213.54
Street Mains	2,680.40
Gas Appliances on Rental	9.68
Meters and Connections	116.53
Services	400.10
Office Furniture & Fixtures	11,441.94
Horses, Wagons and Harness	3,326.06
Automobiles and Accessories	10,574.71

Tools and Implements	97,242.66
Boats and Scows	40,903.16
Electric Power House	117,555.90
Electric Power House Contents	271,871.92
Shop and Office Building	88,610.45
Shop and Office Building Contents	73,606.62
Steel Storage Sheds	40,712.21
General Electric Distribution System	199,751.71
Mess Hall	65,040.20
Mess Hall Contents	18,426.61
Steel Storage Building No. 3	18,792.02
Terra Cotta Storage Tanks	700.00
Wash and Locker House	27,710.66
Wash and Locker House Contents	12,663.31
Paint and Oil Storage Building	300.00
Railroad	464,903.96
Railroad Equipment—Narrow Gauge	40,831.13
Railroad Equipment—Standard Gauge	263,573.21
Permanent Fresh Water System	153,655.13
North Shore Pump House	5,073.10
North Shore Pump House Contents	9,227.64
Crushing and Grinding Plant	3,314.32
Experimental Benzol Enrichment Plant	937.87
Rigger's Loft	4,704.42
Launch Tenders Store House—Section 1 dock	460.11
Fire Brick Shed No. 2	36,032.95
Oil Storage Tanks—East River Dock	1,443.40
Laboratory	38,743.16
Laboratory Contents	21,762.67
Observation Towers and Equipment	6,164.52
Forward	$6,096,146.90

[fol. 3423] Forward	$6,096,146.90
Paint Shop	6,184.53
Oxide Yard	29,870.12
Storage Holder No. 1	923,413.62
Storage Holder No. 2	1,251,171.12
Hose Houses	102.33
Main Gate House and Gate	1,511.88
Luyser Creek Coal Unloading Plant	570,970.53

Plant "A":

Inclined Retort House	417,615 23
Inclined Retort House Contents	1,196,633 04
West Tar Extractor and Washer House	35,216.78
West Tar Extractor and Washer House Contents	146,371 36
West Condenser House	26,571 98
West Condenser House Contents	87,360 77
West Purifier House	123,049 69
West Purifier House Contents	215,374 10
Coal Handling Apparatus Adj. to Inclined Ret. Hse.	75,019 94
Coke Handling Apparatus Adj. to Inclined Ret. Hse.	43,626 01

Plant "B":

Horizontal Retort House	304,645 69
Horizontal Retort House Contents	1,180,056 92
East Tar Extractor and Washer House	34,789 85
East Tar Extractor and Washer House Contents	149,461 27
East Condenser House	26,263.91
East Condenser House Contents	87,379 39
East Purifier House	156,629 02
East Purifier House Contents	212,714 78
Coal Handling Apparatus Adj. to Horiztl. Ret. Hse.	112,858 77
Coke Handling Apparatus Adj. to Horiztl. Ret. Hse.	79,874 26

Plant "A" and "B":

Boiler House	21,906 24
Boiler House Contents	47,106 90
Chimney for Boiler House	4,921 53
Exhauster House	26,372 18
Exhauster House Contents	60,606 28
Meter House	22,837 82
Meter House Contents	45,492 84
Storage Holder No. 1	
Tar Tanks Underground	23,408 92
Ammonia Tanks Underground	51,498 64

Cyanogen Plant	35,355.82
General Connections	171,975.89
Sulphate of Ammonia Plant Buildings	134,521 13
Sulphate of Ammonia Plant Contents	234,798 82
Coal Handling Apparatus—Coal Unloading Towers	143,532 57
Coal Handling Apparatus—Coal Storage Bridge	205,991.91
Forward	$14,827,375.80

[fol. 3424] Forward	$14,827,375 80
Coke Handling Apparatus—Coke Delivery System	23,237 89
Tar Tanks Overground	6,420.94
Ammonia Tanks Overground	5,675 46
Napthalene Tanks Adjacent to Washer House	2,496.56
Wood's Condenser	2,186 28
Coal Grinding and Sampling House	1,405.18
Tar Storage Tanks Overground No. 5	6,968 39
Storage Tanks Adjacent to Sulphate plant	17,037 08
Scrubber Towers Adjacent to A and B Plants	7,055 56
Pump House Adjacent to A and B Plants	500 00
Plant "C":	
Generator House	189,398 63
Generator House Contents	711,644 56
Shaving Scrubbers	29,659 57
Tar Extractor House	12,426 62
Tar Extractor House Contents	13,068 62
Purifiers	182,875.74
Condensers	78,628.62
Relief Holder	114,383 77
Coal Handling Apparatus North of Generator House	181,525 93
Pump House Adjacent to C Plant	500 00
Scrubber Towers Adjacent to C Plant	7,055 57

Plant "D":	
Generator House	781,334 76
Generator House Contents	1,946,778 82
Shaving Scrubbers	93,417 90
Tar Extractor House	48,995 40
Tar Extractor House Contents	65,508 45
Fuel Handling Apparatus Adjacent to Generator House	315,752 04
Ash Handling Apparatus Adjacent to Generator House	270,209 54
Purifiers	925,304 90
Condensers	366,877 41
Relief Holder	310,215 27
Emulsion Separating Tank	20,187 06
Tar Tanks	8,015 47
Undistributed Construction	.....
Plants "C" and "D":	
Exhauster House	48,706 71
Exhauster House Contents	240,676 78
Boiler House No. 1	38,355 23
Boiler House No. 1 Contents	96,817 59
Boiler House No. 1 Chimneys	12,838 03
Pump House	51,532 63
Pump House Contents	93,009 03
Meter House	48,087 23
Meter House Contents	251,919 95
Separators	113,671 27
Forward	$22,569,738.26
[fol. 3425] Forward	$22,569,738 26
General Connections	549,639 21
Boiler House No. 2	141,372 55
Boiler House No. 2 Contents	381,801 72
Boiler House No. 2 Chimneys	36,494 33
Tar Tanks Overground	7,880 19
Tar Storage Tank Overground No. 7	7,080 45
Photometer and Calorimeter House	13,309 55
Photometer and Calorimeter House Contents	16,221 00
Oil Tanks	347,721 47

Oil Pump House—Section F Bulkhead	3,644 42
Oil Pump House—Section F Bulkhead Contents	12,245 51
Oil Pump House Contents	24 94
Miscellaneous:	
Engineering Department	827,505 58
Organization	47,552 75
Temporary Structures	21,413 37
Temporary Structures Demolished	30,606 49
Hoisting Apparatus	10,056 27
Temporary Railroad	9,707 49
Demolishing Buildings	1,164 25
Citizens' Mutual Franchise	50,000 00
Interest as of December 31, 1908	997,301 79
Interest on Construction Expenditures	285,821 34
Storeroom Expenses	
Insurance During Construction	30,996 29
Taxes During Construction	67,565 45
Legal Expense During Construction	28,601 24
Stable Expense During Construction	9,532 95
General Expense During Construction	29,114 09
Sundry Expense During Construction	376,994 75
Office Expense During Construction	115,373 78
Repairs to Temporary Structures During Construction	3,849 49
Repairs to Temporary Railroad and Eq. During Const.	9,123 20
Repairs to Railroad and Equipment During Construction	28,566 93
Repairs to Hoisting Apparatus During Construction	4,677 73
Repairs to Buildings During Construction	8,309 95
Repairs to Tools and Implements During Construction	51,041 40
Repairs to Boats and Scows During Construction	4,475 39
Repairs to Permanent Fresh Water Sys. During Const.	1,358 96
Repairs to Water Plant and Mains During Construction	3,369 20
Total	$27,135,089 21

Less two-thirds of the original cost of Luyster Creek Coal Handling Plant and Storage Facilities devoted to the use of the New York Edison Company	998,136 05
	$26,136,953 16

[fol. 3426] The Astoria Light, Heat and Power Company

Original Cost of Fixed Capital Employed in the Gas Business as of December 31, 1922

[fol. 3427] General:

Real Estate	$1,227,997 85
Assessments	32 53
Improvements on Real Estate	1,389,278 98
Luyster Creek Bulkhead	534,113 68
North Shore Dock—Interior Crib	193,429 20
East River Crib Bulkhead	51,979 08
North Shore Crib Bulkhead	197,871 14
North Shore Buoys	33 00
North Shore Trestle	13,287 02
Crib Dock Extension—Old Dock	2,494 92
Repairs to Docks & Sea Walls During Construction	3,601 34
Outshore Crib Berrian's Island	4,213 54
Street Mains	2,680 40
Gas Appliances on Rental	9 68
Meters and Connections	116 53
Services	400 10
Office Furniture & Fixtures	11,371 79
Horses, Wagons and Harness	3,326 06
Automobiles and Accessories	4,862 73
Tools and Implements	90,131 72
Boats and Scows	39,964 06
Electric Power House	117,555 90
Electric Power House Contents	252,608 27
Shop and Office Building	88,610 45
Shop and Office Building Contents	73,606 62
Steel Storage Sheds	40,712 21
General Electric Distribution System	189,402 26
Mess Hall	62,596 34

Mess Hall Contents	16,485 72
Steel Storage Building No. 3	18,792 02
Terra Cotta Storage Tanks	700 00
Wash and Locker House	27,710 66
Wash and Locker House Contents	12,663 31
Paint and Oil Storage Building	300 00
Railroad	460,717 57
Railroad Equipment—Narrow Gauge	40,831 13
Railroad Equipment—Standard Gauge	243,631 93
Permanent Fresh Water System	141,677 32
North Shore Pump House	5,073 10
North Shore Pump House Contents	9,227 64
Crushing and Grinding Plant	3,314 32
Experimental Benzol Enrichment Plant	937 87
Rigger's Loft	4,704 42
Launch Tender's Store House—Section 1 Dock	460 11
Fire Brick Shed No. 2	36,032 95
Oil Storage Tanks—East River Dock	1,443 40
Laboratory	38,743 16
Laboratory Contents	21,762 67
Forward	$5,681,496 70
[fol. 3428] Forward	$5,681,496 70
Observation Towers and Equipment	6,164 52
Paint Shop	6,184 53
Oxide Yard	29,870 12
Hose Houses	102 33
Storage Holder No. 1	923,412 62
Storage Holder No. 2	1,248,991 38
Main Gate House and Gate	359 96
Plant "A":	
Inclined Retort House	417,615 23
Inclined Retort House Contents	1,196,620 38
West Tar Extractor and Washer House	35,216 78
West Tar Extractor and Washer House Contents	146,371 36
West Condenser House	26,571 98
West Condenser House Contents	87,360 77
West Purifier House	123,049 69

West Purifier House Contents	215,372 50
Coal Handling Apparatus Adjacent to Inclined Ret. Hse.	75,019 94
Coke Handling Apparatus Adjacent to Inclined Ret. Hse.	43,626 01
Plant "B":	
Horizontal Retort House	304,645 69
Horizontal Retort House Contents	1,174,605 20
East Tar Extractor and Washer House	34,789 85
East Tar Extractor and Washer House Contents	149,461 27
East Condenser House	26,263 91
East Condenser House Contents	87,379 39
East Purifier House	156,629 02
East Purifier House Contents	212,714 78
Coal Handling Apparatus Adj. to Horiztl. Ret. Hse.	112,699 73
Coke Handling Apparatus Adj. to Horiztl. Ret. Hse.	79,874 26
Plant- "A" and B":	
Boiler House	21,906 24
Boiler House Contents	47,100 16
Chimney for Boiler House	4,921 53
Exhauster House	26,372 18
Exhauster House Contents	60,606 28
Meter House	22,837 82
Meter House Contents	45,452 24
Luyster Creek Coal Unloading Bridge	348,927 30
Tar Tanks Underground	23,408 92
Ammonia Tanks Underground	51,498 64
Cyanogen Plant	35,355 82
General Connections	171,951 19
Sulphate of Ammonia Plant Buildings	133,321 35
Sulphate of Ammonia Plant Contents	232,583 36
Coal Handling Apparatus—Coal Unloading Towers	143,532 57
Coal Handling Apparatus—Coal Storage Bridge	205,991 91
Forward	$14,178,238 41

[fol. 3429] Forward	$14,178,238 41
Coke Handling Apparatus—Coke Delivery System	23,237 89
Tar Tanks Overground	6,420 94
Ammonia Tanks Overground	5,675 46
Napthalene Tanks Adjacent to Washer House	2,496 56
Wood's Condenser	2,186 28
Coal Grinding and Sampling House	1,325 47
Tar Storage Tanks Overground No. 5	6,968 39
Storage Tanks Adjacent to Sulphate Plant	17,037 08
Scrubber Tower Adjacent to A and B Plants	7,055 56
Pump House Adjacent to A and B Plants	500 00
Plant "C":	
Generator House	189,382 70
Generator House Contents	706,366 34
Shaving Scrubbers	29,659 57
Tar Extractor House	12,426 62
Tar Extractor House Contents	13,068 62
Purifiers	182,875 74
Condensers	78,628 62
Relief Holder	114,383 77
Coal Handling Apparatus No. of Generator House	181,112 42
Pump House Adjacent to C Plant	500 00
Scrubber Towers Adjacent to C Plant	7,055 57
Plant "D":	
Generator House	780,184 70
Generator House Contents	1,945,755 18
Shaving Scrubbers	93,417 30
Tar Extractor House	48,995 40
Tar Extractor House Contents	65,464 18
Fuel Handling Apparatus Adj. to Generator House	314,654 53
Ash Handling Apparatus Adj. to Generator House	270,085 21
Purifiers	925,304 90
Condensers	366,820 91
Relief Holder	310,088 37
Emulsion Separating Tank	20,187 06
Tar Tanks	8,015 47

Plants "C" and "D":	
Exhauster House	48,706 71
Exhauster House Contents	239,749 67
Boiler House No. 1	38,355 25
Boiler House No. 1 Contents	96,716 55
Boiler House No. 1 Chimneys	12,838 03
Pump House	51,532 63
Pump House Contents	92,155 81
Meter House	48,087 23
Meter House Contents	251,879 35
Separators	113,671 27
General Connections	549,634 30
Forward	$22,458,902 62
[fol. 3439] Forward	22,458,902 62
Boiler House No. 2	141,372 55
Boiler House No. 2 Contents	381,740 68
Boiler House No. 2 Chimneys	36,494 33
Tar Tanks Overground	7,880 19
Tar Storage Tank Overground No. 7	7,080 45
Photometer and Calorimeter House	13,309 55
Photometer and Calorimeter House Contents	9,567 35
Oil Tanks	346,770 21
Oil Pump House—Section F Bulkhead	3,644 42
Oil Pump House—Section F Bulkhead Contents	12,245 51
Oil Pump House Contents	24 94
Miscellaneous:	
Engineering Department	780,056 83
Organization	17,265 00
Temporary Structures	21,413 37
Temporary Structures Demolished	30,606 49
Hoisting Apparatus	10,056 27
Temporary Railroad	9,707 49
Demolishing Buildings	1,164 25
Citizens' Natual Franchise	50,000 00
Interest on Const. Expenditures prior to Dec. 31, 1908	997,301 79

Interest on Const. Expenditures since Dec. 31, 1908	285,821 34
Insurance During Construction	30,996 29
Taxes During Construction	67,565 45
Legal Expense During Construction	28,601 24
Stable Expense During Construction	9,532 95
General Expense During Construction	29,114 00
Office Expense During Construction	112,289 18
Sundry Expense During Construction	371,247 07
Repairs to Temporary Structure During Construction	3,849 49
Repairs to Temporary Railroad and Eq. During Const.	9,123 20
Repairs to Railroad and Equipment During Const.	28,566 93
Repairs to Hoisting Apparatus During Const.	4,677 73
Repairs to Buildings During Construction	8,309 95
Repairs to Tools and Implements During Const.	49,724 75
Repairs to Boats and Scows During Const	4,475 39
Repairs to Permanent Fresh Water Sys. During Const	1,358 96
Repairs to Water Plant and Mains During Const.	3,369 20
Total	$26,385,227 50
Less two-thirds of the original cost of Luyster Creek Coal Handling Plant and Storage Facilities devoted to the use of the New York Edison Company	615,438 21
	$25,769,744 29

2373

[fol. 3431] The Astoria Light, Heat and Power Company

Original Cost of Fixed Capital Employed in the Gas Business as of June 30, 1922

[fol. 3432] General:

Real Estate	$1,227,997 85
Assessments	25 55
Improvements on Real Estate	1,313,094 67
Luyster Creek Bulkhead	245,607 94
North Shore Dock—Interior Crib	193,429 20
East River Crib Bulkhead	51,979 08
North Shore Crib Bulkhead	197,871 14
North Shore Buoys	33 00
North Shore Trestle	13,287 02
Crib Dock Extension—Old Dock	2,494 92
Repairs to Docks & Sea Walls During Construction	3,601 34
Outshore Crib—Berrian's Island	4,213 54
Street Mains	2,680 40
Gas Appliances on Rental	9 68
Meters and Connections	116 53
Services	400 10
Office Furniture and Fixtures	11,352 04
Horses, Wagons and Harness	3,326 06
Automobiles and Accessories	3,579 17
Tools and Implements	97,850 87
Boats and Scows	33,808 15
Electric Power House	117,555 90
Electric Power House Contents	246,284 76
Shop and Office Building	88,610 45
Shop and Office Building Contents	65,937 14
Steel Storage Sheds	40,712 21
General Electric Distribution System	169,011 95
Mess Hall	31,653 11
Mess Hall Contents	14,979 62
Steel Storage Building No. 3	18,792 02
Terra Cotta Storage Tanks	700 00
Wash and Locker House	27,710 66
Wash and Locker House Contents	12,663 31
Paint and Oil Storage Building	300 00
Railroad	440,312 08

Railroad Equipment—Narrow Gauge	40,831 13
Railroad Equipment—Standard Gauge	219,143 43
Permanent Fresh Water System	141,329 89
North Shore Pump House	5,073 10
North Shore Pump House Contents	9,227 64
Crushing and Grinding Plant	3,314 32
Experimental Benzol Enrichment Plant	937 87
Rigger's Loft	4,704 42
Launch Tenders Store House—Section 1 Dock	460 11
Fire Brick Shed No. 2	36,032 73
Oil Storage Tanks—East River Dock	1,443 40
Laboratory	38,743 16
Laboratory Contents	21,527 90
Forward	$5,204,750 56
[fol. 3433] Forward	$5,204,750 56
Observation Towers and Equipment	6,164 52
Paint Shop	6,184 53
Oxide Yard	29,870 12
Hose Houses	102 33
Storage Holder No. 1	923,413 62
Storage Holder No. 2	1,248,673 71
Plant "A":	
Inclined Retort House	417,615 23
Inclined Retort House Contents	1,195,847 49
West Tar Extractor and Washer House	35,216 78
West Tar Extractor and Washer House Contents	146,371 36
West Condenser House	26,571 98
West Condenser House Contents	87,360 77
West Purifier House	123,049 69
West Purifier House Contents	215,372 50
Coal Handing Apparatus Adj. to Inclined Ret. Hse.	75,019 94
Coke Handling Apparatus Adj. to Inclined Ret. Hse	43,626 01

Plant "B":

Horizontal Retort House	304,645 69
Horizontal Retort House Contents	1,270,442 60
East Tar Extractor and Washer House	34,789 85
East Tar Extractor and Washer House Contents	149,461 27
East Condenser House	26,263 91
East Condenser House Contents	87,379 39
East Purifier House	156,629 02
East Purifier House Contents	212,678 35
Coal Handling Apparatus Adj. to Horiztl. Ret. Hse.	108,259 56
Coke Handling Apparatus Adj. to Horiztl. Ret. Hse.	79,874 26

Plants "A" and "B":

Boiler House	21,906 24
Boiler House Contents	45,134 02
Chimney for Boiler House	4,921 53
Exhauster House	26,372 18
Exhauster House Contents	60,606 28
Meter House	22,837 82
Meter House Contents	45,452 24
Tar Tanks Underground	23,408 92
Ammonia Tanks Underground	51,498 64
Cyanogen Plant	35,345 31
General Connections	171,949 01
Sulphate of Ammonia Plant Buildings	129,441 88
Sulphate of Ammonia Plant Contents	137,003 26
Coal Handling Apparatus—Coal Unloading Towers	143,528 10
Coal Handling Apparatus—Coal Storage Bridge	205,579 40
Coke Handling Apparatus—Coke Delivery System	23,237 89
Forward	$13,363,857 76

[fol. 3434] Forward	$13,363,857 76
Tar Tanks Overground	6,420 94
Ammonia Tanks Overground	5,675 46
Napthalene Tanks Adjacent to Washer House	2,496 56
Wood's Condenser	2,186 28
Coal Grinding and Sampling House	1,325 47
Tar Storage Tanks Overground No. 5	6,968 39
Storage Tanks Adjacent to Sulphate Plant	17,037 08
Scrubber Towers Adjacent to A and B Plants	7,055 56
Pump House Adjacent to A and B Plants	500 00
Plant "C":	
Generator House	189,380 49
Generator House Contents	691,832 92
Shaving Scrubbers	29,659 57
Tar Extractor House	12,426 62
Tar Extractor House Contents	13,068 62
Purifiers	182,875 74
Condensers	78,628 62
Relief Holder	114,383 77
Coal Handling Apparatus North of Generator House	179,701 83
Pump House Adjacent to C Plant	500 00
Scrubber Towers Adjacent to C Plant	7,055 57
Plant "D":	
Generator House	772,891 01
Generator House Contents	1,666,377 63
Shaving Scrubbers	85,297 97
Tar Extractor House	48,867 68
Tar Extractor House Contents	58,929 28
Fuel Handling Apparatus Adjacent to Generator House	282,390 94
Ash Handling Apparatus Adjacent to Generator House	252,689 63
Purifiers	855,808 90
Condensers	335,741 31
Relief Holder	287,528 70
Emulsion Separating Tank	18,033 21
Tar Tanks	8,015 47
Undistributed Construction	838,050 49

Plants "C" and "D":	
Exhauster House	48,706 71
Exhauster House Contents	215,309 11
Boiler House No. 1	38,355 25
Boiler House No. 1 Contents	93,839 11
Boiler House No. 1 Chimneys	12,838 03
Pump House	51,139 42
Pump House Contents	76,939 00
Meter House	47,597 23
Meter House Contents	234,706 31
Separators	102,324 35
General Connections	506,914 13
Forward	$21,852,327 12
[fol. 3435] Forward	$21,852,327 12
Boiler House No. 2	131,323 90
Boiler House No. 2 Contents	334,025 35
Boiler House No. 2 Chimneys	33,243 74
Tar Tanks Overground	7,880 19
Tar Storage Tanks Overground No. 7	7,080 45
Photometer and Calorimeter House	13,309 55
Photometer and Calorimeter House Contents	8,067 35
Oil Tanks	323,165 11
Oil Pump House—Section F Bulkhead	3,644 42
Oil Pump House—Section F Bulkhead Contents	12,239 17
Oil Pump House Contents	24 94
Miscellaneous:	
Engineering Department	658,655 14
Organization	4,750 00
Temporary Structures	27,114 23
Temporary Structures Demolished	30,606 49
Hoisting Apparatus	10,056 27
Temporary Railroad	9,707 49
Demolishing Buildings	1,172 29
Citizens' Mutual Franchise	50,000 00
Interest on Construction Expends. prior to Dec. 31, 1908	997,301 79
Interest on Construction Expends. since Dec. 31, 1908	286,907 85

Insurance During Construction	30,996 29
Taxes During Construction	67,565 45
Legal Expense During Construction	28,601 24
Stable Expense During Construction	9,532 95
General Expense During Construction	29,114 09
Sundry Expense During Construction	314,557 52
Office Expense During Construction	86,616 44
Repairs to Temporary Structures During Const.	3,849 49
Repairs to Temporary Railroad and Eq. During Const.	9,123 20
Repairs to Railroad and Eq. During Const.	28,511 64
Repairs to Hoisting Apparatus During Const.	4,677 73
Repairs to Building During Const.	8,309 95
Repairs to Tools and Implements During Const.	48,826 83
Repairs to Boats and Scows During Const.	4,475 39
Repairs to Permanent Fresh Water Sys. During Const.	1,358 96
Repairs to Water Plant and Mains During Const.	3,369 20
Total	$25,492,089 21

[fol. 3436] PLAINTIFF'S EXHIBIT No. 830

The Astoria Light, Heat & Power Company

Working Capital, 1922-1923

[fol. 3437] Astoria Light, Heat & Power Company

Average Actual Working Capital Employed for Corporate Purposes During the Year 1923

1923	Cash	Accounts receivable	Material and supplies	Total
January 31.	$398,096.29	$1,402,752.33	$2,305,182.50	$4,106,031.12
February 28.	472,074.13	1,312,796.92	2,325,905.18	4,110,776.23
March 31...	80,830.86	1,333,060.49	2,189,632.45	3,603,523.80
April 30....	372,388.23	1,207,656.44	2,350,428.33	3,930,473.00
May 31.....	164,426.17	875,331.22	2,535,931.98	3,573,689.37
June 30.....	133,745.40	982,690.30	2,559,311.52	3,675,747.22
July 31.....	386,869.38	942,057.44	2,781,701.82	4,110,628.64
August 31...	148,736.23	1,334,309.20	2,957,890.06	4,440,935.49
September 30	243,454.78	983,364.94	3,082,726.43	4,309,546.15
October 31..	627,151.51	1,043,858.15	3,091,525.42	4,762,535.08
November 30	297,569.73	1,199,537.77	2,918,956.34	4,416,063.84
December 31	826,094.55	1,101,523.21	2,827,430.72	4,755,048.48
Total.	$4,151,437.26	$13,716,938.41	$31,926,622.75	$49,794,998.42
Average	$345,953.10	$1,143,078.20	$2,660,551.90	$4,149,583.20

[fol. 3438] Astoria Light, Heat & Power Company

Average Actual Working Capital Employed for Corporate Purposes During the Year 1922

1923	Cash	Accounts receivable	Material and supplies	Total
January 31..	$869,018.26	$1,430,471.47	$2,325,614.33	$4,625,104.06
February 28..	234,960.66	1,737,726.02	2,353,249.58	4,325,936.26
March 31....	302,060.16	1,391,519.73	2,388,437.42	4,082,017.31
April 30.....	771,282.10	1,073,305.24	2,303,154.41	4,147,741.75
May 31.....	684,341.36	990,220.69	2,132,075.09	3,806,637.14
June 30.....	659,333.44	957,160.44	1,893,013.49	3,509,507.37
July 31.....	1,048,917.28	936,154.16	1,647,224.30	3,632,295.74
August 31....	1,038,574.82	1,431,829.48	1,440,212.77	3,910,617.07
September 30	88,126.34	1,963,299.96	1,690,801.80	3,742,228.10
October 31...	121,482.57	2,178,026.54	1,946,682.83	4,246,191.94
November 30.	248,048.22	1,951,116.51	1,954,457.59	4,153,622.32
December 31.	149,619.28	1,702,495.68	2,108,085.60	3,960,200.56
Total .	$6,215,764.49	$17,743,325.92	$24,183,009..21	$48,142,099.62
Average	$517,980.37	$1,478,610.50	$2,015,250.77	$4,011,841.64

[fol. 3439] Astoria Light, Heat & Power Company

Working Capital Necessary in the Gas Business, Exclusive of Accounts Receivable from Affiliated Companies, During the Year 1923

1923	Necessary average cash	Actual accts. receivable—gas, exclusive of amounts due from affiliated companies	Actual material & supplies, gas	Total
January 31.....	$500,000	$142,032.68	$2,305,182.50	$2,947,215.18
February 28.....	500,000	109,220.16	2,325,905.18	2,935,125.34
March 31.....	500,000	145,145.90	2,189,634.45	2,834,778.35
April 30.....	500,000	156,215.15	2,350,428.33	3,006,643.48
May 31.....	500,000	160,983.24	2,535,931.98	3,196,915.22
June 30.....	503,000	135,901.49	2,559,311.52	3,195,213.01
July 31.....	500,000	123,686.10	2,781,701.82	3,405,387.92
August 31.....	500,000	92,785.91	2,957,890.06	3,550,675.97
September 30.....	500,000	87,248.01	3,082,726.43	3,669,974.44
October 31.....	500,000	79,752.75	3,091,525.42	3,671,278.17
November 30.....	500,000	112,404.35	2,918,956.34	3,531,360.69
December 31.....	500,000	104,204.64	2,827,430.72	3,431,635.36
Total	$6,000,000	$1,449,580.38	$31,926,622.75	$39,376,203.13
Average	500,000	120,798.36	2,660,551.90	3,281,350.26
Say				$3,280,000.00

[fol. 3440] Astoria Light, Heat & Power Company

Working Capital Necessary in the Gas Business, Exclusive of Accounts Receivable from Affiliated Companies During the Year 1922

1922	Necessary average cash	Actual accts. receivable—gas, exclusive of amounts due from affiliated companies	Actual material & supplies, gas	Total
January 31.....	$500,000	$68,767.27	$2,325,614.33	$2,894,381.60
February 28.....	500,000	149,395.52	2,353,249.58	3,002,645.10
March 31.....	500,000	142,973.55	2,388,437.42	3,031,410.97
April 30.....	500,000	129,281.45	2,303,154.41	2,932,435.86
May 31.....	500,000	95,046.59	2,132,075.09	2,727,121.68
June 30.....	500,000	128,305.90	2,893,013.49	2,521,319.39
July 31.....	500,000	114,723.19	1,647,224.30	2,261,947.49
August 31.....	500,000	66,299.66	1,440,212.77	2,006,512.43
September 30.....	500,000	244,290.82	1,690,801.80	2,435,092.62
October 31.....	500,000	224,418.88	1,946,682.83	2,671,101.71
November 30.....	500,000	344,019.82	1,954,457.59	2,798,477.41
December 31.....	500,000	287,400.64	2,108,085.60	2,895,486.24
Total	$6,000,000	$1,994,923.29	$24,183,009.21	$32,177,932.50
Average	500,000	166,243.61	2,015,250.77	2,681,494.28
Say				$2,680,000.00

[fol. 3441] PLAINTIFF'S EXHIBIT No. 831

Consolidated Gas Company of New York

Summary of the Cost of the Property Used by the Consolidated Gas Company of New York in Its Gas Business, Including Both the Property Owned by the Company and the Portion used by the Company of Joint Facilities Owned by Affiliated Gas Companies—

As of—June 1, 1923

—Dec. 31, 1923

—Dec. 31, 1922

[fol. 3442] Consolidated Gas Company of New York

Summary of the Cost of the Property Used by the Consolidated Gas Company of New York in Its Gas Business, as of June 1, 1923, Including Both the Property Owned by the Company and the Portion Used by the Company of Joint Facilities Owned by Affiliated Gas Companies.

Portion of Property Owned by the Consolidated Gas Company, and devoted to its own Gas Business—Per Summary Schedules		$66,358,363 44
Property Owned by Astoria Light, Heat & Power Co.—Per Schedules.		
Total Fixed Capital (exclusive of portion used by New York Edison Company)	$26,136,953 16	
Average Working Capital	3,280,000 00	
Total	$29,416,953 16	
Portion used by Consolidated Gas Company—80.074419%		$23,555,454 33

Property Owned by East River Gas Company of L. I. C. (Per Pltff. Ex. 766):		
Astoria Tunnel	$5,177,126 91	
Ravenswood Tunnel	700,000 00	
48″ and 60″ Mains on Long Island	846,192 61	
Property of Standard Gas Light Company (Per Pltff. Ex. 766):		
48″ Harlem River Main	197,911 54	
Total	$6,921,231 06	
Portion of Tunnels and Connecting Mains owned by the above companies, used by the Consolidated Gas Company—56.445902%		3,906,751 29
Property of Standard Gas Light Company:		
Portion of 62nd Street Governor & Boiler House and land used by Consolidated Gas Company, (Per Pltff. Ex. 766)		75,443 04
Total		$93,896,012 10

(NOTE.—The foregoing is exclusive of investment in 15th Street holder property of New Amsterdam Gas Company, and Meter and Appliance Repair Shop property at 408 East 111th Street, and 124th Street Fitting Shop property of the Standard Gas Light Company.)

Summary of the Cost of the Property—Continued

[fol. 3443] Consolidated Gas Company of New York

Summary of the Cost of the Property used by the Consolidated Gas Company of New York in Its Gas Business, as of December 31, 1923, Including Both the Property Owned by the Company and the Portion Used by the Company of Joint Facilities Owned by Affiliated Gas Companies.

Portion of Property Owned by the Consolidated Gas Company, and devoted to its own Gas Business—Per Summary Schedules		$67,849,810 97
Property Owned by Astoria Light, Heat & Power Co.—Per Schedules:		
Total Fixed Capital (exclusive of portion used by New York Edison Company)	$26,557,522 56	
Average Working Capital	3,280,000 00	
Total	$29,837,522 56	
Portion used by Consolidated Gas Company—80.074419%		23,892,222 83
Property Owned by East River Gas Company of L. I. C. (Per Pltff. Ex. 766):		
Astoria Tunnel	$5,177,126 91	
Ravenswood Tunnel	700,000 00	
48" and 60" Mains on Long Island	846,192 61	

Property of Standard Gas Light Company (Per Pltff. Ex. 766):		
48" Harlem River Main	197,911 54	
Total	$6,921,231 06	
Portion of Tunnels and Connecting Mains owned by the above companies, used by the Consolidated Gas Company—56.445902%		3,906,751 29
Property of Standard Gas Light Company:		
Portion of 62nd Street Governor & Boiler House and land used by Consolidated Gas Company, (Per Pltff. Ex. 766)		75,443 04
Total		$95,724,228 13

(NOTE.—The foregoing is exclusive of investment in 15th Street holder property of New Amsterdam Gas Company, and Meter and Appliance Repair Shop property at 408 East 111th Street, and 124th Street Fitting Shop property of the Standard Gas Light Company.)

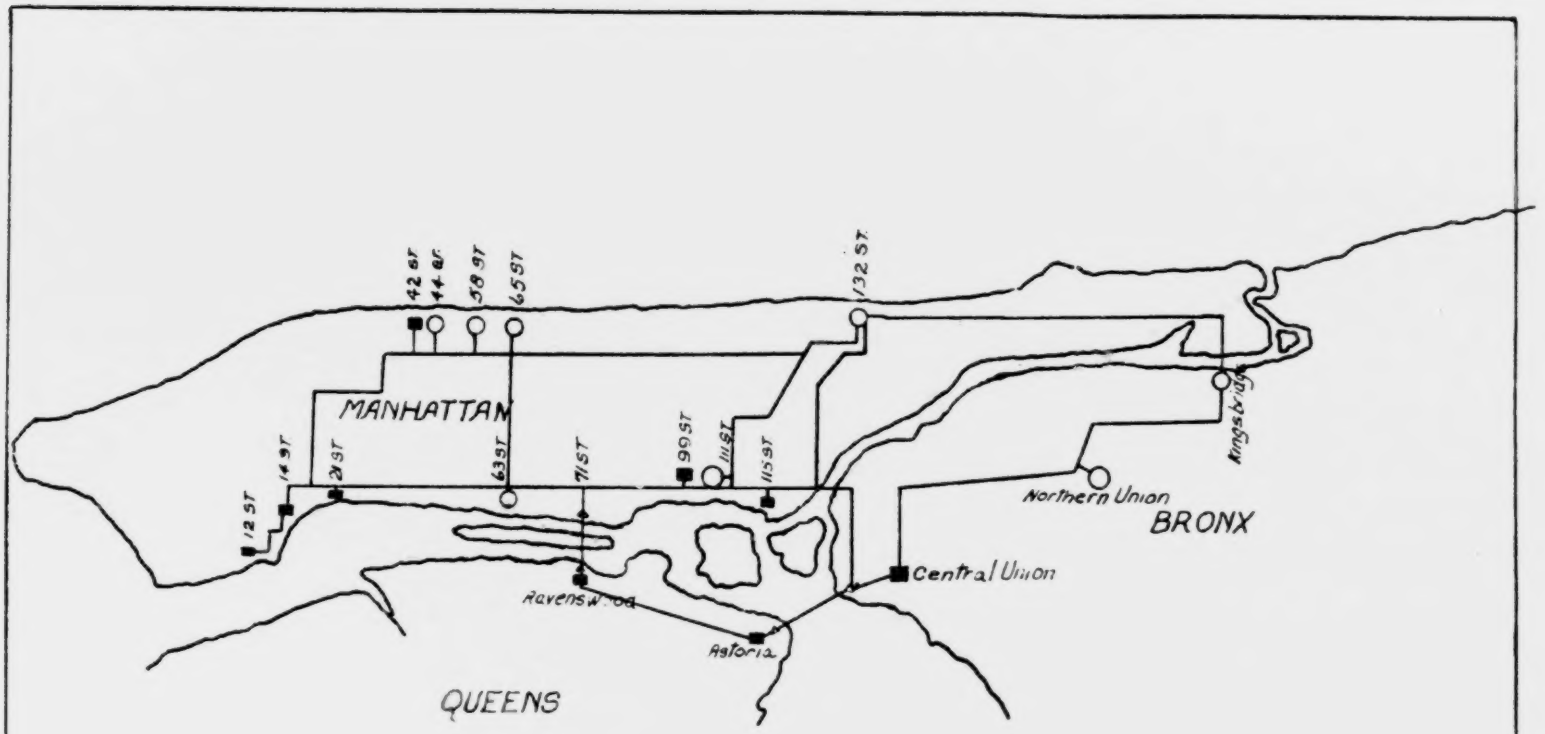
[fol. 3444] Consolidated Gas Company of New York

Summary of the Cost of the Property used by the Consolidated Gas Company of New York in Its Gas Business, as of December 31, 1922, Including Both the Property Owned by the Company and the Portion Used by the Company of Joint Facilities Owned by Affiliated Gas Companies.

Portion of Property Owned by the Consolidated Gas Company, and devoted to its own Gas Business—Per Summary Schedule	$63,781,793 32

Summary of the Cost of the Property—Continued

Property Owned by Astoria Light, Heat, & Power Co.—Per Schedule:		
Total Fixed Capital (exclusive of portion used by New York Edison Company)	$25,769,744 29	
Average Working Capital	2,680,000 00	
Total	$28,449,744 29	
Portion used by Consolidated Gas Company—87.339535%		24,847,874 37
Property Owned by East River Gas Company of L. I. C. (Per Pltff. Ex. 765):		
Astoria Tunnel	$5,177,495 03	
Ravenswood Tunnel	700,000 00	
48″ and 60″ Mains on Long Island	846,192 61	
Property of Standard Gas Light Company (Per Pltff. Ex. 765):		
48″ Harlem River Main	197,911 54	
Total	$6,921,599 18	
Portion of Tunnels and Connecting Mains owned by the above companies, used by the Consolidated Gas Company—61.567213%		4,261,435 71



GAS TRANSFER SYSTEM
OF THE
CONSOLIDATED GAS COMPANY AND AFFILIATED GAS COMPANIES

Diagram Showing Transfer Mains, Manufacturing Stations, And Holder Stations In The Boroughs Of Manhattan, The Bronx And Queens as of June 1st 1923.

■ Denotes Works
○ Denotes Holder Stations
△ Denotes Tunnel Shafts
— Denotes Transfer Mains

Property of Standard Gas Light Company:	
Portion of 62nd Street Governor & Boiler House and land used by Consolidated Gas Company, (Per Pltff. Ex. 765)	58,560 40
Total	$92,949,668 80

(NOTE.—The foregoing is exclusive of investment in 15th Street holder property of New Amsterdam Gas Company, and Meter and Appliance Repair Shop property at 408 East 111th Street, and 124th Street Fitting Shop property of the Standard Gas Light Company.)

(Here follows Plaintiff's Exhibit No. 832, marked side folio page 3445.)

[fol. 3446] PLAINTIFF'S EXHIBIT No. 833

Consolidated Gas Company of New York

Forecast of Manufacturing Requirements for Years Indicated Based on 7 Years' Experience

1917-1924

Winter of	Est. max. s. o.	Est. max. s. o. + 25%	Generating capacity 1924	Deficiency based on 1924 capacity	Building program indicates completion by end of yr. first given	Building deficiency	Total manufacturing capacity	Reserve capacity, M c. f.	Reserve capacity, per cent
1924-25	128,400	160,500	136,364	24,136					
1925-26	137,100	171,375	136,364	35,011	36,000	*989	172,364	35,264	25.72
1926-27	146,400	183,000	136,364	46,636	15,000	*4,364	187,364	40,964	27.98
1927-28	156,300	195,375	136,364	59,011	.....	8,011	.....	31,064	19.87
1928-29	166,900	208,625	136,364	72,261	18,000	3,261	205,364	38,464	23.05
1929-30	178,200	222,750	136,364	86,386	15,000	2,386	220,364	42,164	23.66
1930-31	190,200	237,750	136,364	101,386	18,000	*614	238,364	48,164	25.32
1931-32	203,000	253,750	136,364	117,386	15,000	386	253,364	50,364	24.81
1932-33	216,700	270,875	136,364	134,511	.....	17,511	.....	36,664	16.92
1933-34	231,300	289,125	136,364	152,761	33,000	2,761	286,364	55,064	23.81
1934-35	246,900	308,625	136,364	172,261	.....	22,261	.....	39,464	15.98

Construction program provides for a maximum reserve of 25% over maximum day Send Out.

Forecast of Manufacturing Requirements for Years Indicated Based on 10 Years' Experience 1914-1924

Winter of	Est. max. s. o.	Est. max. s. o. + 25%	Generating capacity 1924	Deficiency based on 1924 capacity	Building program indicates completion by end of yr. first given	Building deficiency	Total manufacturing capacity	Reserve capacity, M. c. f.	Reserve capacity, per cent
1924-25	125,675	157,094	136,364	20,730					
1925-26	131,296	164,120	136,364	27,756	18,000	9,756	154,364	23,068	17.57
1926-27	137,169	171,461	136,364	35,097	15,000	2,097	169,364	32,195	23.47
1927-28	143,305	179,131	136,364	42,767		9,767		26,059	18.18
1928-29	149,715	187,144	136,364	50,780	18,000	*220	187,364	37,649	25.15
1929-30	156,412	195,515	136,364	59,151		8,151		30,952	19.79
1930-31	163,408	204,260	136,364	67,896	15,000	1,896	202,364	38,956	23.84
1931-32	170,717	213,396	136,364	77,032		11,032		31,647	18.54
1932-33	178,353	222,941	136,364	86,577	15,000	5,577	217,364	39,011	21.87
1933-34	186,331	232,914	136,364	96,550		15,550		31,033	16.65
1934-35	194,666	243,333	136,364	106,969	18,000	7,969	235,364	40,698	20.91
1935-36	203,373	254,216	136,364	117,852		18,852		31,991	15.73
1936-37	212,470	265,588	136,364	129,224	18,000	12,224	253,364	40,894	19.25
1937-38	221,974	277,468	136,364	141,104		24,104		31,390	14.14
1938-39	231,903	289,879	136,364	153,515	33,000	3,515	286,364	54,461	23.48
1939-40	242,276	302,845	136,364	166,481		16,481		44,088	18.20
1940-41	253,113	316,391	136,364	180,027		30,027		33,251	13.14

Construction program provides for a maximum reserve of 25% over maximum day Send Out.

[fol. 3448]

Consolidated Gas Company of N. Y.

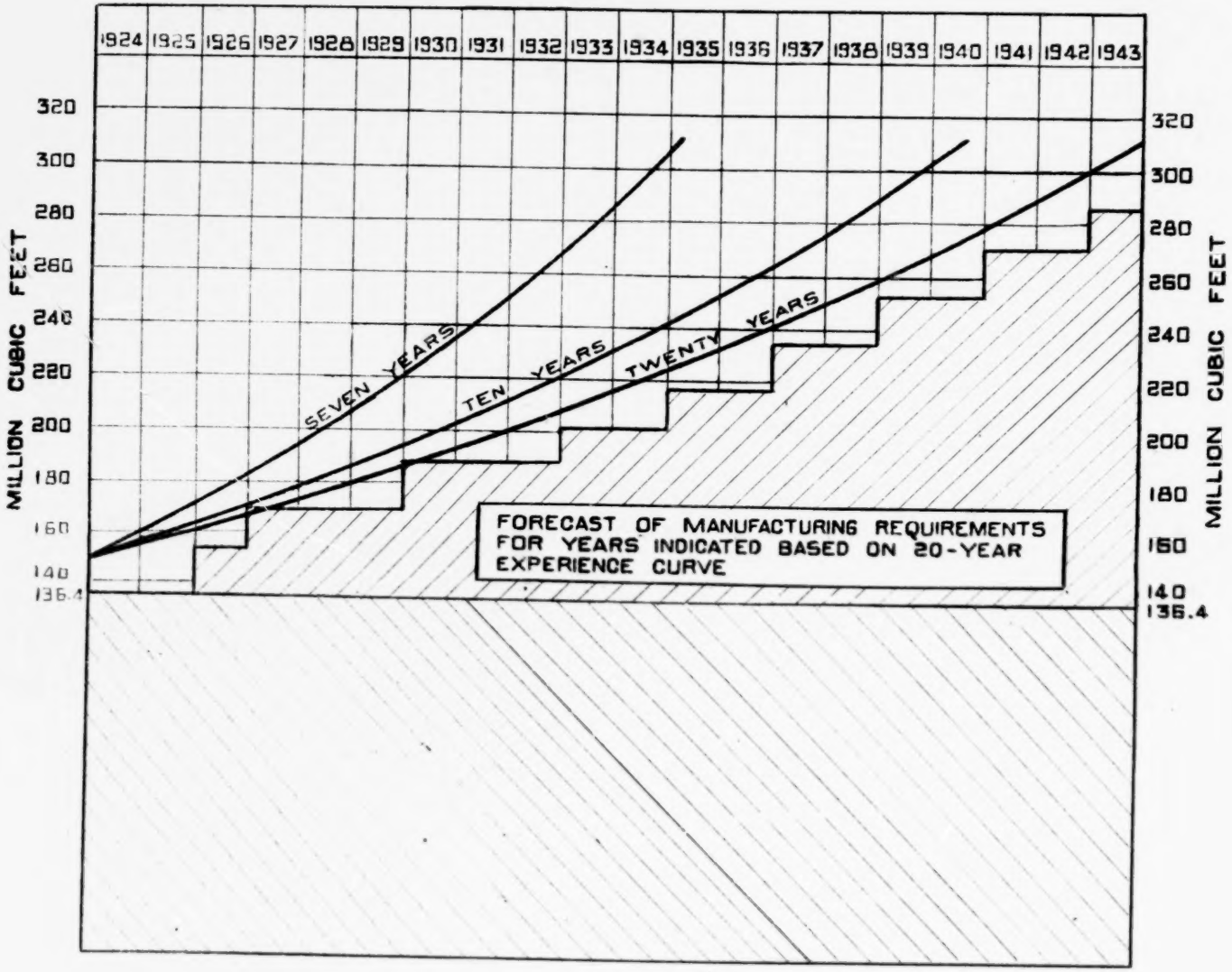
Forecast of Manufacturing Requirements for Years Indicated Based on 20 Years' Experience

1904-1924

Winter of	Est. max. s. o.	Est. max. s. o. + 25%	Generating capacity 1924	Deficiency based on 1924 capacity	Building program indicates completion by end of yr. first given	Building deficiency	Total manufacturing capacity	Reserve capacity, M c. f.	Reserve capacity, per cent
1924-25	124,771	155,964	136,364	19,600					
1925-26	129,415	161,769	136,364	25,405	18,000	7,405	154,364	24,949	19.28
1926-27	134,232	167,790	136,364	31,426	15,000	*1,574	169,364	35,132	26.17
1927-28	139,228	174,035	136,364	37,671	.....	4,671	.....	30,136	21.65
1928-29	144,410	180,513	136,364	44,149	.....	11,149	..	24,954	17.28
1929-30	149,785	187,231	136,364	50,867	18,000	*133	187,364	37,579	25.09
1930-31	155,360	194,200	136,364	57,836	.....	6,836	.....	42,004	20.60
1931-32	161,142	201,428	136,364	65,064	.....	14,064	....	26,222	16.27
1932-33	167,140	208,925	136,364	72,561	15,000	6,561	202,364	35,224	21.07
1933-34	173,361	216,701	136,364	80,337	.....	14,337	.....	29,003	16.73
1934-35	179,813	224,766	136,364	88,402	15,000	7,402	217,364	37,551	20.88
1935-36	186,506	233,133	136,364	96,767	.....	15,769	.....	30,858	16.55
1936-37	193,448	241,810	136,364	107,446	18,000	6,446	235,364	41,916	21.67
1937-38	200,648	250,810	136,364	114,446	.....	15,446	.....	34,716	17.30

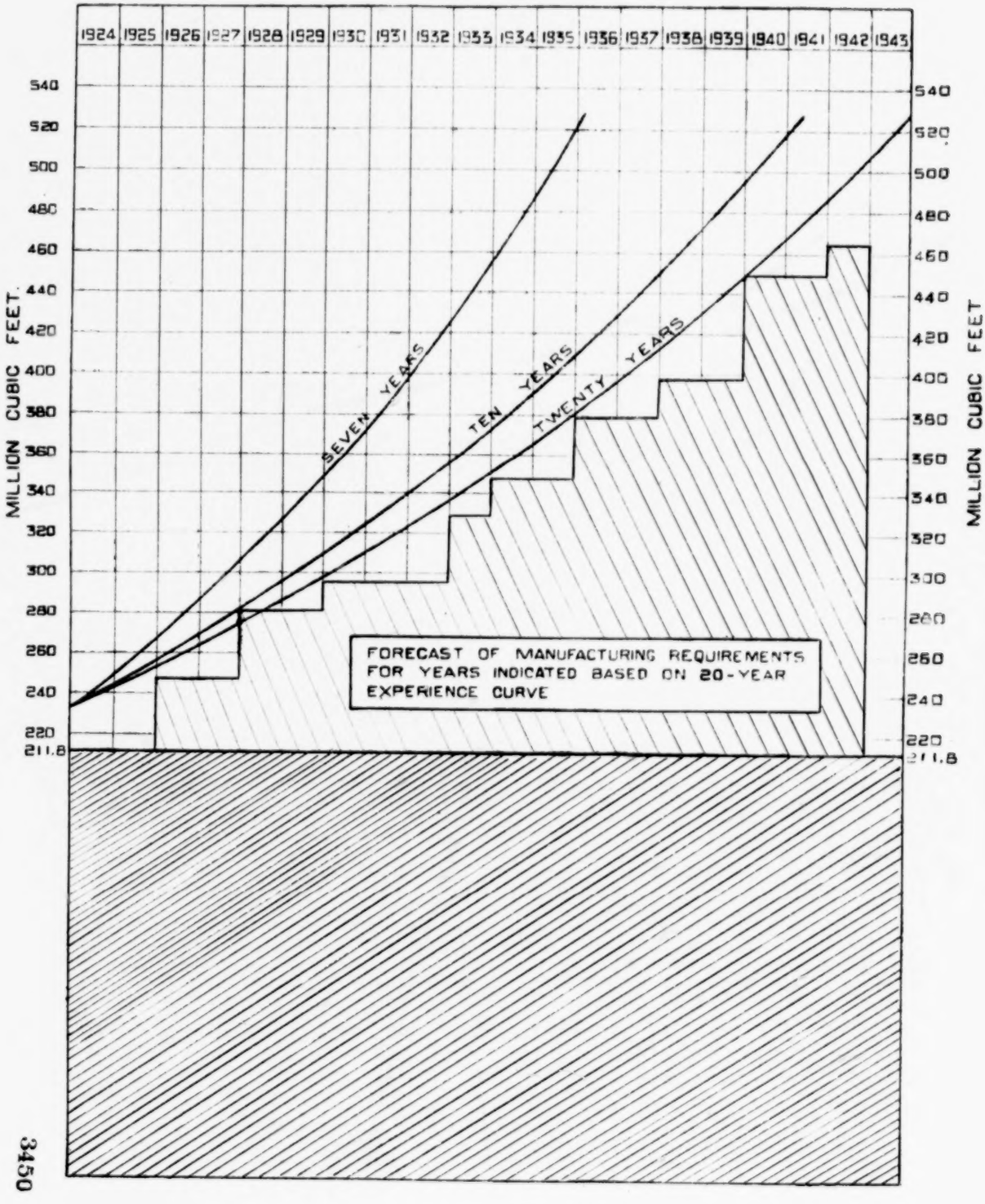
PLAINTIFF'S EXHIBIT NO. 833

CONSOLIDATED GAS COMPANY



PLAINTIFF'S EXHIBIT NO. 834

CONSOLIDATED GAS COMPANY AND COMPANIES CONNECTED TO THE GENERAL TRANSFER SYSTEM



3450

1938-39	208,116	260,145	136,364	123,781	18,000	6,781	253,364	45,248	21.74
1939-40	215,862	269,828	136,364	133,464	.....	16,464	.....	37,502	17.37
1940-41	223,896	279,870	136,364	143,506	18,000	8,506	271,364	47,468	21.20
1941-42	232,229	290,286	136,364	153,922	.....	18,922	.....	39,135	16.85
1942-43	240,873	301,091	136,364	164,727	15,000	14,727	286,364	45,491	18.89
1943-44	249,838	312,298	136,364	175,934	.....	25,934	.....	36,526	14.62

Construction program provides for a maximum reserve of 25% over maximum day Send Out.

(Here follow side folio pages 3449 and 3450)

[fol. 3451] Consolidated Gas Company and Companies Connected to the General Transfer System

Forecast of Manufacturing Requirements for Years Indicated Based on 7 Years' Experience

1917-1924

Winter of	Est. max. s. o.	Est. max. s. o. + 25%	Generating capacity 1924	Deficiency based on 1924 capacity	Building program indicates completion by end of yr. first given	Building deficiency	Total manufacturing capacity	Reserve capacity, M. c. f.	Reserve capacity, per cent
1924-25	200,100	250,125	211,800	38,325					
1925-26	213,900	267,375	211,800	55,575	51,000	4,575	262,800	48,900	22.86
1926-27	228,700	285,875	211,800	74,075	15,000	8,075	277,800	49,100	21.47
1927-28	244,500	305,625	211,800	93,825	18,000	9,825	295,800	51,300	20.98
1928-29	261,400	326,750	211,800	114,950	33,000	*2,050	328,800	67,400	25.77
1929-30	279,400	349,250	211,800	137,450	.	20,450	....	49,400	17.68
1930-31	298,700	373,375	211,800	161,575	35,000	8,575	364,800	66,100	23.13
1931-32	319,300	399,125	211,800	187,325	15,000	19,325	379,800	60,500	18.95
1932-33	341,300	426,625	211,800	214,825	36,000	10,825	415,800	74,500	21.83
1933-34	364,800	456,000	211,800	244,200	33,000	7,200	448,800	84,000	23.03
1934-35	390,000	487,500	211,800	275,700	.....	38,700	..	58,800	15.08
1935-36	416,800	521,125	211,800	309,325	54,000	18,325	502,800	86,000	20.63

Construction program provides for a maximum reserve of 25% over maximum day Send Out.

[fol. 3452] Consolidated Gas Company and Companies Connected to the General Transfer System

Forecast of Manufacturing Requirements for Years Indicated Based on 10 Years' Experience

1914-1924

Winter of	Est. max. s. o.	Est. max. s. o. + 25%	Generating capacity 1924	Deficiency based on 1924 capacity	Building program indicates completion by end of yr. first given	Building deficiency	Total manufacturing capacity	Reserve capacity, M c. f.	Reserve capacity, per cent
1924-25	196,200	245,250	211,800	33,450					
1925-26	205,600	257,000	211,800	45,200	36,000	9,200	247,800	42,200	20.53
1926-27	215,500	269,375	211,800	57,575	.....	21,575	.. ..	32,300	14.99
1927-28	225,800	282,250	211,800	70,450	33,000	1,450	280,800	55,000	24.36
1928-29	236,600	295,750	211,800	83,950	.....	14,950	.. ..	44,200	18.68
1929-30	248,000	310,000	211,800	98,200	15,000	14,200	295,800	47,800	19.27
1930-31	259,900	324,875	211,800	113,075	.....	29,075	.. ..	35,900	13.81
1931-32	272,400	340,500	211,800	128,700	33,000	11,700	328,800	56,400	20.70
1932-33	285,500	356,875	211,800	145,075	18,000	10,075	346,800	61,300	21.47
1933-34	299,200	374,000	211,800	162,200	.	27,200	.. ..	47,600	15.91
1934-35	313,600	392,000	211,800	180,200	33,000	12,200	379,800	66,200	21.11
1935-36	328,700	410,875	211,800	199,075	18,000	13,075	397,800	69,100	21.02
1936-37	344,500	430,625	211,800	218,825	.....	32,825	.. ..	53,300	15.47
1937-38	361,000	451,250	211,800	239,450	54,000	*550	451,800	90,800	25.15
1938-39	378,300	472,875	211,800	261,075	.. .	21,075	.. ..	73,500	19.43
1939-40	396,500	495,625	211,800	283,825	51,000	*7,175	502,800	196,300	26.81
1940-41	415,500	519,375	211,800	307,575	.. .	16,575	.. ..	87,300	21.01
1941-42	435,400	544,250	211,800	332,450	.....	41,250	..	67,400	15.48

Construction program provides for a maximum reserve of 25% over maximum day Send Oct.

151—357

8888

[fol. 3453] Consolidated Gas Company and Companies Connected to the General Transfer System

Forecast of Manufacturing Requirements for Years Indicated Based on 20 Years' Experience

1904-1924

Winter of	Est. max. s. o.	Est. max. s. o. + 25%	Generating capacity 1924	Deficiency based on 1924 capacity	Building program indicates completion by end of yr. first given	Building deficiency	Total manufacturing capacity	Reserve capacity, M. c. f.	Reserve capacity, per cent
1924-25	195,000	243,750	211,800	31,950					
1925-26	203,100	253,875	211,800	42,075	36,000	6,075	247,800	44,700	22.01
1926-27	211,500	264,375	211,800	52,575	.....	16,575	.....	36,300	17.16
1927-28	220,300	275,375	211,800	63,575	33,000	*5,425	280,800	60,500	27.46
1928-29	229,400	286,750	211,800	74,950	.....	5,950	.....	51,400	22.41
1929-30	238,900	298,625	211,800	86,825	15,000	2,825	295,800	56,900	23.82
1930-31	248,900	311.125	211,800	99,325	.....	15,325	.....	46,900	18.84
1931-32	259,200	324,000	211,800	112,200	.....	28,200	.....	36,600	14.12
1932-33	270,000	337,500	211,800	125,700	33,000	8,700	328,800	58,800	21.78
1933-34	281,000	351,500	211,800	139,700	18,000	4,700	346,800	65,800	23.42
1934-35	292,900	366,125	211,800	154,325	.....	19,325	.....	53,900	18.40
1935-36	305,100	381,375	211,800	169,575	33,000	1,575	379,800	74,700	24.48
1936-37	317,800	397,250	211,800	185,450	.....	17,450	.....	62,000	19.51
1937-38	331,000	413,750	211,800	201,950	18,000	15,950	397,800	66,800	20.18

1938-39	344,700	430,875	211,800	219,075	.....	33,075	.....	53,100	15.40
1939-40	359,000	448,750	211,800	236,950	51,000	*50	448,800	89,800	25.01
1940-41	373,900	476,400	211,800	255,600	.....	18,600	.....	74,900	20.03
1941-42	389,400	486,750	211,800	274,950	15,000	22,950	463,800	74,400	19.11
1942-43	405,600	507,000	211,800	295,200	.....	43,200	.....	58,200	14.35
1943-44	422,400	528,000	211,800	316,200	.....	64,200	.....	41,400	9.80

Construction program provides for a maximum reserve of 25% over maximum day Send Out.

[fol. 3454] PLAINTIFF'S EXHIBIT No. 835

Maximum Day's Send Out

Winter of	System companies date	M cubic feet	Consolidated Gas Company	
			% of total	Cubic feet
1916-17	Feb. 5, 1917	117,645	65 03%	76,504
1917-18	Feb. 5, 1918	150,537	65 18%	98,120
1918-19	Jan. 10, 1919	125,789	64 35%	80,945
1919-20	Jan. 31, 1920	166,488	64 87%	108,001
1920-21	Jan. 18, 1921	167,473	64 88%	108,657
1921-22	Feb. 17, 1922	169,563	64 47%	109,317
1922-23	Feb. 23, 1923	179,188	64 38%	115,361
1923-24	Jan. 21, 1924	187,228	64 25%	120,294

[fol. 3455] PLAINTIFF'S EX. NO. 836

Jacobs & Davies, Inc., Consulting Engineers, Hudson Terminal, 30 Church Street, New York

May 1st, 1924

Astoria Tunnel of the East River Gas Company of Long Island City

Estimated Cost of Reproduction as of June 1, 1923

Item No.	Item	Unit quantity	Quantity	Unit price	Amount
1.	Excavn. shaft, earth, above M S L	C. Yd.	792	$20 70	$16,394 40
2.	" " " below "	" "	2,240	27 90	62,496 00
3.	" " rock " "	" "	18,635	40 50	755,122 50
4.	" tunnel "	" "	63,395	43 00	2,725,985 00
5.	" " bad ground	" "	6,147	63 00	386,631 00
6.	Concrete, shaft	" "	6,435	23 40	150,579 00
7.	" tunnel, sound ground	" "	23,370	32 00	747,840 00
8.	" " bad "	" "	3,994	36 00	143,784 00
9.	Stone packing	" "	1,000	4 50	4,500 00
10.	Grout, shaft	Bbl.	300	6 30	1,800 00
11.	" tunnel, low pressure	"	11,835	18 00	213,630 00
12.	" " high "	"	17,360	43 00	746,480 00
13.	Cast steel lining	Ton	1,365	144 00	196,560 00
14.	" iron "	"	228	108 60	24,624 00

15. Bolts	"	160	202 50	32,400 00
16. Steel sheet piling	"	138	140 40	19,375 20
17. Structural steel	"	267	111 60	29,797 00
18. Iron casting	"	113	144 60	16,560 00
19. Timbering	M. B. M.	43	168 30	7,236 90
20. Test holes in tunnel	Lin. Ft.	44,800	28 00	896,000 00
21. Pumping Plant	Sum			225,000 00
22. Pumping	Million Gal.			
	Cost.	524,000	6 75	243,000 00
23. Preparing site	Lump Sum			5,000 00
24. Engineers' office				20,000 00
25. Exploratory borings				45,000 00
Total of classified items				$7,715,285 00
Add 6% for items not classified				462,917 00
				$8,178,202 00
Engineering, 7%				572,474 00
				$8,750,676 00

4637

The work estimated includes the construction of the shafts and tunnel. No equipment, such as pipes pumps, latters, elevators, etc. installed within the shafts or tunnel or upon the surface, is included in this estimate, except that the track and runway in tunnel are included.

[fol. 3456] These figure include—

(a) Payments in full to a contractor for the complete work.

(b) The cost of the necessary engineering involving preliminary investigation, design, survey, and supervision during construction.

The estimates do not include the cost of the following items——

(a) Legal expenses
(b) Administration expenses
(c) Land and easements
(d) Taxes
(e) Equipment of shafts and tunnels
(f) Head houses
(g) Cost of money and interest charges

For the purpose of computing the interest charges we have also estimated the period required for construction as follows—

Astoria Tunnel ..... 4½ years

Jacobs & Davies, Inc.
By J. Vipond Davies,
President.

[fol. 3457] PLAINTIFF'S EXHIBIT No. 837

Jacobs & Davies, Inc., Consulting Engineers, Hudson Terminal, 30 Church Street, New York

Cable Address, Vexillum

May 1st, 1924.

Ravenswood Tunnel of the East River Gas Company of Long Island City

Estimated Cost of Reproduction as of June 1, 1923

Item No.	Item	Air press (Note)	Unit quantity	Quantity	Unit price	Amount
1.	Excavn. shaft, earth	N	C. Yd.	77	$20 70	$1,593 90
2.	" " rock, dry	"	"	485	37 80	18,333 00
3.	" " " wet	"	"	570	37 80	21,546 00
4.	" tunnel, rock, hard	"	"	6,714	22 50	151,065 00
5.	" " " "	C	"	1,972	62 10	122,461 20
6.	" " " shield	"	"	864	62 10	53,654 40
7.	" " earth "	CC	"	611	82 80	50,590 80
8.	Concrete, "	N	"	275	14 40	3,960 00
9.	"	C	"	216	22 50	4,860 00
10.	Stone Packing	N	"	36	5 40	194 40
11.	" "	C	"	427	7 20	3,074 40

6632

Estimated Cost of Reproduction as of June 1, 1923—Continued

Item No.	Item	Air press (Note)	Unit quantity	Quantity	Unit price	Amount
12.	Brickwork	N	"	40	36 90	1,476 00
13.	C. I. Lining shaft	"	Ton	159	124 20	19,747 80
14.	" " tunnel	"	"	67	124 20	8,321 40
15.	" " "	C	"	794	124 20	98,614 80
16.	" " "	CC	"	186	133 20	24,775 20
17.	Bolts, shaft	N	"	7	169 20	1,184 40
18.	" tunnel	N	"	3	169 20	507 60
19.	" "	C	"	35	202 50	7,087 50
20.	" "	CC	"	8	229 50	1,836 00
21.	Grout	N	Bbl.	963	7 20	6,933 60
22.	"	C	"	2,880	9 00	25,920 00
23.	Drill hole, 12" dia.	N	Lin. Ft.	130	15 30	1,989 00
24.	" " 8" "	"	"	130	10 80	1,404 00
25.	Preparation of site	"	Lump Sum			1,800 00
26.	Engineers' office	"	"			28,800 00
27.	Exploratory borings	"	"			18,000 00
28.	Allowance for plant	"	"			108,000 00
	Total of Classified Items					$787,730 40
	Add 6% for items not classified					47,263 60
						$834,994 00

Engineering, 7%	58,450 00
	$893,444 00

152—357

NOTE.—In the above table N indicates Normal air pressure.
C " moderate " "
CC " heavy " "

The work estimated includes the construction of the shafts and tunnel. No equipment, such as pipes, pumps, ladders, elevators, etc., installed within the shafts or tunnel or upon the surface, is included in this estimate.

2401

[fol. 3458] These figures include—

(a) Payments in full to a contractor for the complete work.

(b) The cost of the necessary engineering involving preliminary investigation, design, survey, and supervision during construction.

The estimates do not include the cost of the following items—

(a) Legal expenses.
(b) Administration expenses.
(c) Land and easements.
(d) Taxes.
(e) Equipment of shafts and tunnels.
(f) Head Houses.
(g) Cost of money and interest charges.

For the purpose of computing the interest charges we have estimated also the period required for construction as follows:

Ravenswood Tunnel . . . . . 2 Years.

Jacobs & Davies, Inc., by J. Vipond Davies, President.

[fol. 3459] United States District Court, Southern District of New York

In Equity. No. 26-366

Consolidated Gas Company of New York, Plaintiff,

against

Albert Ottinger, as Attorney-General of the State of New York, Defendant

Stipulation as to Plaintiff's Exhibit No. 838

It is stipulated and agreed that Plaintiff's Exhibit No. 838, consisting of 296 pages, which is endorsed "Consolidated Gas Company, Inventory & Reproduction Costs of Structures & Appurtenances as of June 1, 1923, Volume

I," be not printed in full, but that there be printed the following pages, which contain summaries of the detail costs:

Page entitled "Consolidated Gas Company, General Summary of Costs and Page Index of Works,"

Pages, setting forth "General Summary of Costs upon a Subcontract Basis as of June 1, 1923," of the structures and appurtenances, respectively, at the 11th Street Works, the 21st Street Works, and the 99th Street Works.

There shall also be printed the pages forming part of Plaintiff's Exhibit No. 838, relating to the 14th Street [fol. 3460] Works and the 42nd Street Works, as setting forth the detail costs of the structures and appurtenances at the 14th Street Works and the 42nd Street Works and as specimen pages of the detail inventory of the structures and appurtenances at the 11th Street Works, 21st Street Works, and 99th Street Works.

It is further stipulated and agreed by the defendant Attorney General and appellant, but only for the purposes of this appeal:

(a) That the structures and appurtenances set forth in Plaintiff's Exhibit No. 838 were in existence on June 1, 1923;

(b) That the structures and appurtenances set forth in Plaintiff's Exhibit No. 838, except those described as being at the 14th Street Works and the 42nd Street Works, were used and useful in the business of the plaintiff and appellee on June 1, 1923; provided, however, appellant does not by so stipulating withdraw his assignments of error Nos. 5, 7, 10, 13, 24, 26, 39, 41, or any other assignment of error in which the same or similar questions are raised or waive the right to present, brief and argue questions of law and fact contained in such assignments of error;

(c) That the quantities, units, unit prices and total cost contained in Plaintiff's Exhibit No. 838 are a correct estimate of the cost to reproduce as of June 1, 1923, each and every item contained in said exhibit on a subcontract basis as the same is described in the testimony of Henry Burt, upon the trial. It is understood, however, that the appel- [fol. 3461] lant does not, by so stipulating, concede that the subcontractor's profit is properly included in such an estimate of the cost to reproduce, or that the figure for field overhead should be included or is in the proper

amount. Appellant reserves the right to contest on this appeal the propriety and amount of both field overhead and subcontractor's profit.

Dated, New York, April 27, 1926.

Shearman and Sterling, Solicitors for Plaintiff and Appellee. John Holley Clark, Jr., Solicitor for Defendant Attorney-General and Appellant.

(Here follows Plaintiff's Exhibit No. 838, marked side folio pages 3462 to 3558, inclusive)

PLAINTIFF'S EXHIBIT NO. 838

CONSOLIDATED GAS COMPANY

GENERAL SUMMARY OF COSTS

and

PAGE INDEX

of

W O R K S

WORKS	TOTAL COST	PAGES
11th Street Works	$1,114,186.85	1 - 71
21st Street Works	1,701,554.51	1 - 98
29th Street Works	399,947.13	1 - 38
34th Street Works	776,179.94	1 - 45
42nd Street Works	796,099.78	1 - 44
GRAND TOTAL -	$4,787,968.30	

NOTE: - No Allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during constuction.

NOTE: - The above totals include the amounts applied to the total costs of the repective structures, for Field Over head varying from 6 - 7% and for Building Contractor's Profit of 10% as described in testimony of Henry R. Burt.

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CONSOLIDATED GAS COMPANY

11th STREET WORKS

GENERAL SUMMARY OF COSTS

upon

A SUB-CONTRACT BASIS

as of

JUNE 1, 1923

STRUCTURES		TOTAL COST	PAGE
"Y"	- Stove Storage	$30,185.89	1 -
"B-3"	- Boiler House	$29,032.41	3 -
"Y-1"	- Radiator Storage	9,878.72	
"O"	- Purifier House	115,846.61	6 -
"P"	- Purifier House	77,261.09	8 -
"P-1"	- Watchman's House	1,091.83	
"Q-1"	- Governor House	5,129.78	11-
"Q-2"	- Governor House	4,859.83	13-
-----	- Yard Toilet	1,127.83	
-----	- Boiler & Oxide House	17,541.11	16-
-----	- Fire Brick Storage Shed	1,116.78	
-----	- Locker Room	501.79	
-----	- Oil Storage House	2,184.78	
"Q"	- Governor House	8,893.29	21-
"L-M"	- Bldg. "L-M"-Office,Shops,etc.	158,279.42	23-
"A-D"	- Generator & Condenser Hse,A1 & D1	154,302.35	28-
"A"	- Generator House	89,889.56	30-
"G"	- Condenser House	19,774.58	
"H"	- Scrubber House	24,719.89	
-----	- Tar Sep. Pump House & Oil House	6,684.23	34-
"C"	- Engine & Blower House	8,064.83	36-
"B-1&C-1"	- Boiler & Engine House	30,551.59	38-
"D"	- Hazelton Boiler House	7,796.65	
"B"	- Boiler House	11,850.30	
-----	- Pump House	784.07	
-----	- Coaling Shed	103,938.15	43-
"N-1"	- Conveyor Housing	13,327.09	
"N"	- Coal Bin Tank	32,745.56	
-----	- Gate House, 12th St. & Ave. D.	195.12	
"Q-4"	- Governor House	4,799.31	48-
"Q-3"	- Governor House	4,719.45	50-
-----	- Dump	7,983.90	
"T"	- Stable	22,810.18	53-
"U"	- Paint & Blacksmith Shop	9,125.56	55-
"S"	- Laboratory	4,119.96	57-
"Y-H"	- Hose House	753.97	

CONSOLIDATED GAS COMPANY

11th STREET WORKS

GENERAL SUMMARY OF COSTS

upon

A SUB-CONTRACT BASIS

as of

JUNE 1, 1923

STRUCTURES		TOTAL COST	PAGES
-	Tar Pump House (Oil Tank #1)	$590.88	60
-	Oil Pump House, Tank No. 1	642.33	61
-	Pump House Bet. Tanks 1 & 4	113.97	62
-	Pump House Bet. Tanks 1 & 3	85.70	63
-	Tar Pump House	3,605.50	64
-	E. 13th St. Dock	14,795.07	65
-	Watchman's Shanty	198.68	66
-	Misc. Pits	704.73	67
MAINTENANCES			
-	Pavements	18,352.70	68
-	Fences	46,088.75	69
-	Yard Lighting	196.13	70
-	Power Wiring	6,954.00	71
	GRAND TOTAL - -	$1,114,186.85	

NOTE: - No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

3464

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

21st STREET WORKS

GENERAL SUMMARY OF COSTS

upon

A SUB-CONTRACT BASIS

as of

JUNE 1, 1923.

STRUCTURES			TOTAL COST	PAGE
"V-3"	-	Coal Storage Shed #3	$44,249.89	
"V-2"	-	Coal Storage Shed	49,349.19	53-54
"X-2"	-	Tool Storage	2,170.04	
"Z-A"	-	Horse Hospital	4,586.48	
"K"	-	Office	35,609.90	57-59
"H-g"	-	Generators	134,581.98	60-61
"H-4"	-	Engine & Blower Rooms	35,339.96	62-63
"H-2"	-	Machine Shop & Store Room	6,623.12	
"H-C"	-	Condensers	74,414.52	65-66
"A-c"	-	Tank House	17,835.66	
"H-b"	-	Boilers	41,490.03	
"H-s"	-	Retort & Work Shop	70,861.34	69-71
"H-1"	-	Blacksmith Shop	5,352.02	
------	-	Lunch Room	864.85	
------	-	Scale House near Lunch Room	150.62	
"PH"	-	Salt Water Pump House	7,160.80	
------	-	Scale House near Salt W. Pump Hse.	161.17	
------	-	Fire Pump House	212.62	
"N"	-	Pump House	7,691.64	
"M"	-	Pump House	4,376.47	
"A-d"	-	Tank Shed	1,189.23	
"A-C"	-	Pump House	340.35	
------	-	Water Meter House	61.58	
"V-1"	-	Coal Shed #1	60,058.82	83-84
------	-	Subway for Coal Conveyor	22,934.58	
"D-C"	-	Coal Hopper House	461.98	
"D-C"	-	Coal Hoist House	1,528.03	
"D-d"	-	Dump Platform on Bulkhead	3,049.04	
"D-a"	-	Strainer House	334.51	
------	-	Coal Trestle Top of V Bldg.	1,784.04	
------	-	Miscellaneous Pits	8,801.62	

CONSOLIDATED GAS COMPANY

21st STREET WORKS

GENERAL SUMMARY OF COSTS

upon

A SUB-CONTRACT BASIS

as of

JUNE 1, 1923

APPURTENANCES	TOTAL COST	PAGES
— - Fences	$81,743.63	92-94
— - Pavements	21,627.42	95
— - Yard Drains	58.36	96
— - Tank Lighting	1,005.04	97
— - Outside Lighting & Power Wiring	28,199.19	98
GRAND TOTAL - -	$1,701,554.51 - (3 Sheets)	

NOTE: - No allowance made in above for General Contractor's Expense and Profit, Administrative, Interest and Taxes or other undistributed costs during construction.

3466

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

EAST 99th STREET WORKS

GENERAL SUMMARY OF COSTS

upon

A SUB-CONTRACT BASIS

as of

JUNE 1, 1923.

STRUCTURES		TOTAL COST	PAGE
"C"	- Office Building	$35,056.14	1 -
----	- Meter House	20,081.43	4 -
"E"	- Purifier House & Oxide House	59,694.48	6 -
"K"	- Condenser House	15,459.93	8 -
"L"	- Exhauster House	20,710.17	10-11
----	- Tar Pump House	844.80	12
----	- Tank Shed	5,153.36	13
----	- Pump House	151.09	14
----	- Valve Houses G-H-J	588.89	15
"I"	- Valve House	212.47	16
----	- Engine & Exhauster House	26,260.78	17-18
----	- Retort & Boiler House	98,853.57	19-20
"A2"	- Generator House	39,189.46	21
----	- Coal Storage	42,643.14	22
----	- Watchman's House	141.10	23
----	- Watchman's House #3	35.23	24
----	- Tool Shed #3	127.57	25
----	- Privy	58.29	26
----	- Scale House	297.54	27
----	- Wood Shed	39.81	28
----	- Coal Retaining Fences	9,845.86	29
----	- Tool House	49.30	30
----	- Misc. Small Structures	51.05	31
----	- Pits	1,350.16	32-34
APPURTENANCES			
----	- Fences	26,187.36	35
----	- Pavement	15,419.14	36
----	- Sewers	1,269.50	37
----	- Yard Lighting	175.62	38
	GRAND TOTAL -	$399.947.12	

NOTE: - No allowance made in above for General Contractor's Expense and Profit, Administrative, Interest and Taxes or other undistributed costs during construction.

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

GENERAL SUMMARY OF COSTS

upon

A SUB-CONTRACT BASIS

as of

JUNE 1, 1923.

STRUCTURES			TOTAL COST	PAGES
—	-	Purifier & Meter House	$123,579.16	1 - 3
—	-	Office Building	18,964.44	4 - 5
—	-	Tin & Paint Shop	13,062.54	6 - 8
—	-	Engine & Boiler House	17,752.91	9 -10
—	-	Exhauster & Machine Shop	16,862.14	11-12
—	-	Engine House	3,094.60	13
—	-	Blacksmith & Carpenter Shop	12,624.34	14-15
"J-1"	-	Condenser House	20,776.35	16-17
"H"	-	Scrubber	5,618.68	18
"J"	-	Condenser House	11,382.64	19
"K"	-	Retort House	203,106.07	20-22
"L"	-	Coal Pocket	32,587.60	23-25
"M"	-	Gas Engine House	2,277.44	26-27
"N"	-	Boiler House	4,073.14	28
"P"	-	Coal Shed	202,148.39	29-30
"Q"	-	Storage Shed	926.94	31
—	-	Shed No. 1	160.14	32
—	-	Pipe Rack	42.92	35
—	-	Wash House	7,840.17	34-35
—	-	Hoist Engine House	436.15	36
—	-	Watchman's House No. 3	176.15	37
—	-	#4 Drip Oil Shed	179.21	38
—	-	Briquett Shed	362.76	39
—	-	Tool House	114.19	40
APPURTENANCES				
—	-	Fences & Walls	61,151.15	41-42
—	-	Pavements	13,418.01	43
—	-	Miscellaneous Pits	1,970.64	44
—	-	Outside Drainage	1,490.07	45
		GRAND TOTAL -	$776,179.94	

NOTE: - No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

3468

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

PURIFIER & METER HOUSE

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Steam Shovel	5151	Cu.Yd.	.41	2111.9
Excavation, Dry	1391	Cu.Yd.	1.00	1391.0
" Wet	555	Cu.Yd.	1.50	832.5
Backfill	642	Cu.Yd.	.60	385.2
Haul	6568	Cu.Yd.	1.10	7224.8
Piles	765	No.	12.58	9623.7
Pile Capping, 8" x 12"	14.416	M.B.M.	111.00	1600.1
Concrete Footings, 1-3-5	6	Cu.Yd.	10.69	64.1
Concrete Floor,	854	Cu.Yd.	10.69	9129.2
Cement Finish, 1"	11957	Sq.ft.	.105	1255.4
Brickwork, Com.	677.796	M.	49.55	33584.7
Bentil Courses	311	Lin.ft.	.25	77.7
Mason Centers	212	Sq.ft.	.263	55.7
Bluestone Sills, etc.	198	Cu.ft.	5.80	1148.4
" Coping	153	Cu.ft.	5.50	841.5
" Caps,	30	Cu.ft.	5.80	174.0
" Steps, etc.	265	Cu.ft.	5.75	1523.7
" Flagging.	1489	Sq.ft.	.36	536.0
" Curb,	36	Cu.ft.	2.55	91.8
Granite Block Pavement	235	Sq.Yd.	5.21	1224.3
Structural Steel	113800	Lb.	.0623	7089.7
Steel Floor Plates	62017	Lb.	.12	7442.0
Ornamental Iron				2704.1
Lumber, 12" Y.P.	14.492	M.B.M.	101.60	1472.5
Lumber, 10" "	3.444	M.B.M.	99.60	343.0
Lumber, 8" "	6.513	M.B.M.	95.30	620.6
Lumber, 6" "	.248	M.B.M.	95.30	23.6
Lumber, 4" "	2.471	M.B.M.	95.30	235.4
Sheathing, 1"	1.179	M.B.M.	71.60	84.4
Floor, 3" x 12"	9.022	M.B.M.	96.60	871.5
Flooring, 1" T. & G.	1.148	M.B.M.	71.60	82.2
Wood Ladder, 2'9" Wide, with Handrail, 6'0" Long	1	No.	10.75	10.7
Wood Ladders, 1'10" Wide, 13'0" Long	2	No.	19.00	38.0
Wainscot, 1" x 4½" T. & G. B.	320	Sq.ft.	.12	38.4
Wainscot Cap, 2½" x 3½"	80	Lin.ft.	.24	19.2
Base, 2" x 11"	80	Lin.ft.	.60	48.0
Window Seat, 1'6" x 5'0"	2	No.	9.00	18.0
Roofing - Slate	137.56	Sq.	23.00	3163.9
" Tar & Felt	640	Sq.ft.	.13	83.2
Flashing. Zinc,	731	Sq.ft.	.40	292.4
Ridge Roll, "	245	Lin.ft.	.70	171.5
Leaders, " 4"	170	Lin.ft.	.55	93.5
Gutters, " 6"	32	Lin.ft.	.60	19.2

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

PURIFIER & METER HOUSE

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Cast Iron Gutters.	410	Lin.ft.	2.14	877.40
Ventilator, G.I., 24" Dia.	1	No.	130.00	130.00
Windows, D. H., 5'0" x 10'4"	10	No.	65.00	650.00
" Case 4'6" x 2'6"	4	No.	17.05	68.20
" D.H. Mull. 4'9" x 8'0"	4	No.	58.50	234.00
" " " 5'0" x 10'6"	4	No.	76.05	304.20
" Circular, Covered with Sheet Iron, 9'2" Dia.	1	No.	173.40	173.40
" Circular, Covered with Sheathing, 9'2" Dia.	1	No.	103.00	103.00
" D.H. Composed of 6 Sash, 9'9" x 12'6"	2	No.	219.40	438.80
" " 5'0" x 10'6"	2	No.	73.90	147.80
" " 3'6" x 6'0"	4	No.	34.10	136.40
" Sliding, 4'6" x 3'9"	2	No.	23.95	47.90
Doors, Glazed, with 2'6" High Tran., 5'0" x 7'8"	1	Pr.	79.01	79.01
" " 4'7" x 8'0"	2	Pr.	77.56	155.12
" " 4'0" x 7'6"	2	Pr.	48.00	96.00
" " 4'6" x 6'3" with Semi-Circular Head with Tran. 2'3" High	2	Pr.	81.02	162.04
" " 4'6" x 6'9"	1	Pr.	67.80	67.80
" Batten 4'6" x 7'6"	2	Pr.	39.00	78.00
" " 5'2" x 7'5" Sliding,	1	No.	27.00	27.00
" " 3'0" x 6'4" Double Thickness	1	No.	29.50	29.50
" Glazed 4'4" x 7'0"	1	Pr.	57.62	57.62
" Pan. Semi-Circular Tran. & Pilot Door 9'0" x 8'8"	1	Pr.	123.70	123.70
" Pan. Semi-Circular Transome, 9'0" x 8'8"	1	Pr.	92.30	92.30
" " 3'4" x 8'0"	1	No.	36.34	36.34
" Glazed 3'0" x 7'6"	1	No.	45.39	45.39
" Batt. 5'0" x 7'6"	1	Pr.	48.25	48.25
Shutters, Bat. 5'0" x 6'6" Double Tkn.	2	Pr.	11.75	23.50
" " 3'6" x 6'0" " Thickn.	4	Pr.	7.80	31.30
Roof Skylights, 5'10" x 6'0"	2	No.	39.50	79.00
Hardware				47.55

3470

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

PURIFIER & METER HOUSE

COST AS OF JUNE 1, 1925.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Painting, Lead & Oil, 3 Coats	5512	Sq.ft.	.0422	232.61
White Wash	29076	Sq.ft.	.02	581.52
Scaffold				800.00
Plumbing				414.99
Heating				159.02
Gas Piping				374.79
				104995.04
FIELD OVERHEAD - 7%				7349.65
				112344.69
BUILDING CONTRACTOR'S PROFIT-10%				11234.47
TOTAL COST -				123579.16

3471

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

OFFICE BUILDING

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Wet	52	Cu.Yd.	2.50	130.00
" Dry	381	Cu.Yd.	1.00	381.00
Backfill	161	Cu.Yd.	.60	96.60
Sand	272	Cu.Yd.	1.10	299.20
Sheet Piling, 8'0" Deep	181	Lin.ft.	4.68	847.08
Cinder Fill	18	Cu.Yd.	1.20	21.60
Piles	73	No.	12.58	918.34
Concrete Footings, 1-3-5	23	Cu.Yd.	10.69	245.87
Footing Forms	383	Sq.ft.	.106	40.60
Concrete Floor, 1-3-5	15	Cu.Yd.	10.69	160.35
Cement Finish, 1"	982	Sq.ft.	.105	103.11
Cement Stucco	68	Sq.ft.	.25	17.00
Brickwork, Com.	96.81	M.	49.55	4796.94
Corbel & Dentil Courses	138	Lin.ft.	.30	41.40
F.C. Flue Lining, 8" x 18"	60	Lin.ft.	.85	51.00
Bluestone Sills, etc.	104	Cu.ft.	5.80	603.20
" Coping	57	Cu.ft.	5.50	313.50
Lumber, 12" Y.P.	3.011	M.B.M.	101.60	305.92
" 10" "	.94	M.B.M.	99.60	93.62
" 8" "	1.554	M.B.M.	95.30	148.10
" 6" "	.18	M.B.M.	95.30	17.15
" 4" "	.713	M.B.M.	95.30	67.95
" 1" x 6" "	.21	M.B.M.	95.30	20.01
Furring, 1" x 3"	1000	Lin.ft.	.05	50.00
Sheathing, 7/8" x 4½" T. & G. B.	.269	M.B.M.	84.60	22.76
Flooring, 1⅛" x 2½" T. & G. Sp.	1.75	M.B.M.	167.65	293.39
Flooring, 1⅛" x 4½" T. & G. Pine	.915	M.B.M.	126.60	115.94
Roofers, 7/8" x 6" T. & G.	1.4	M.B.M.	71.60	100.24
Roofing, Rubberoid	1122	Sq.ft.	.04	44.88
Flashing, Rubberoid	150	Lin.ft.	.10	15.00
Leaders, G.I., 4"	24	Lin.ft.	.50	12.00
Skylights, G.I., 2'9" x 3'9"	1	No.	15.46	15.46
Skylights, G.I., 2'4" x 2'4"	2	No.	10.82	21.64
Ventilator, G.I., 8" Dia.	1	No.	24.00	24.00
Cast Iron Gutter,	56	Lin.ft.	2.14	119.84
Ornamental Iron				103.93
Base, 1½" x 10½" W.P.	179	Lin.ft.	.45	80.55
" 1½" x 10½" Bl. Walnut	102	Lin.ft.	.62	63.24
Wood Paneling on Parapet, 2'3" High	55	Lin.ft.	2.65	145.75
Doors, Gl. Black Walnut with Tran., 3'0" x 7'0"	1	No.	96.75	96.75
Doors, Panel, 3'0" x 7'6"	1	No.	44.76	44.76
Doors, Gl., Black Walnut, 3'0" x 7'0"	1	No.	75.00	75.00
" " " 2'2" x 7'0"	1	No.	72.50	72.50

3472

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

OFFICE BUILDING

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Door, Trimmed Opening Only, 3'0" x 7'0"	1	No.	29.50	29.5
Door, Panel, Black Walnut, 3'0" x 7'0"	2	No.	71.50	143.0
Door, Panel, Black Walnut 1'7" x 7'0"	1	No.	63.75	63.7
Door, Gl., Black Walnut, Florentine, 3'0" x 7'0"	1	No.	73.50	73.5
Door, Sheet Iron, 2'2" x 6'4"	1	No.	20.17	20.1
Doors, Panel, 3'0" x 7'6"	1	No.	42.64	42.6
Doors, Panel 2'6" x 6'8"	1	No.	24.14	24.1
Door, Batten, 2'6" x 2'8"	1	No.	4.00	4.0
Windows, D. H. 3'3" x 5'9"	3	No.	48.40	145.2
" " 2'11" x 6'2" Walnut Trim	7	No.	58.35	408.4
" " 2'11" x 6'3" Pine Tr.	1	No.	36.60	36.6
" " 3'4" x 5'9"	6	No.	36.90	221.4
" Casement 3'4" x 4'10"	1	No.	23.10	23.1
" " 1'3" x 1'6"	1	No.	11.10	11.1
				4.3
Oak Saddles	1	No.	525.00	525.0
Stairs, 3'6" Wide, 16 Treads,	1	No.	13.50	13.5
Stairs, 2'3" Wide, 5 Tr.	1	No.	90.00	90.0
Marble Mantel with Slate Hearth				42.1
Hardware	636	Sq.Yd.	1.80	1144.8
Plaster on Wood Lath	211	Lin.ft.	.40	84.4
Plaster Cornice	8483	Sq.ft.	.0422	357.8
Painting, Lead & Oil, 3 Coats,	2574	Sq.ft.	.054	139.0
Varnishing,	1	No.	40.00	40.0
Flag Pole				250.0
Scaffold				532.0
Plumbing				230.0
Heating				173.0
Gas Lighting				
				16112.2
FIELD OVERHEAD - 7%				1127.8
				17240.0
BUILDING CONTRACTOR'S PROFIT - 10%				1724.0
TOTAL COST -				18964.0

3473

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

TIN & PAINT SHOP

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
avation, Wet.	40	Cu.Yd.	2.50	100.00
" Dry.	175	Cu.Yd.	1.00	175.00
kfill	154	Cu.Yd.	.60	93.40
l	63	Cu.Yd.	1.10	69.30
et Piling, 8'0" Deep	225	Lin.ft.	4.68	1053.00
les,	56	No.	12.58	704.48
le Capping, Lumber, 10"	1.893	M.B.M.	109.00	206.34
ickwork, Com.	65.184	M.B.M.	49.55	3229.87
um Centers	32	Sq.ft.	.263	8.42
nestone - Sills & Lintels	54	Cu.ft.	5.80	313.20
" Water Table	30	Cu.ft.	5.80	174.00
" Bondstones,	4	Cu.ft.	4.25	17.00
" Keystones, etc.	5	Cu.ft.	5.80	29.00
" Coping,	21	Cu.ft.	5.50	115.50
" Flagging, 2"	192	Sq.ft.	.36	69.12
" Wheel Guards.	4	No.	5.80	23.20
amental Iron				286.16
t Iron Gutter,	89	Lin.ft.	1.14	101.46
ber, Trusses, 10" Y.P.	1.64	M.B.M.	114.60	187.94
" " 8" "	1.312	M.B.M.	110.30	144.71
" 10" "	.933	M.B.M.	99.60	92.93
" 8" "	.1	M.B.M.	95.30	9.53
" 6" "	.108	M.B.M.	95.30	10.29
" 4" "	.85	M.B.M.	95.30	81.01
ring, 1" x 2"	354	Lin.ft.	.05	17.70
oring, 1⅛" x 5½" T. & G.	.125	M.B.M.	106.60	13.33
oring, 7/8 x 2½" T. & G.	.216	M.B.M.	157.65	34.05
oring, 1⅛" x 4½" T. & G.	1.821	M.B.M.	126.60	230.54
oring, 1⅛" x 8½" Sq. Edge	.543	M.B.M.	100.30	54.46
ascot, 7/8" x 4" T. & G.& W.P.	275	Sq.ft.	.24	66.00
" 7/8" x 9½" T. & G. B. & C. B.	354	Sq.ft.	.09	31.86
ascot Cap. 2-Member,	51	Lin.ft.	.135	6.89
rition Sheathing, 7/8" x 3½" T. & G., B. & C.B.	.272	M.B.M.	125.65	34.18
rition Sheathing, 7/8" x 9½" T. & G. & B. & C.B.	2.021	M.B.M.	78.05	157.74
ding, 7/8" x 4½" T.& C. B.	1.574	M.B.M.	99.60	156.77
" 1-1/4" x 10" Sq.Edge, Y.P.	.536	M.B.M.	104.60	56.07
ders, 1" x 10" Sq.Edge, N.C.P.	1.209	M.B.M.	81.60	98.65
r Saddles,	6	No.		4.44
, 1½" x 7½" - 2-Member	85	Lin.ft.	.35	29.75

3474

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

TIN & PAINT SHOP

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Quarter Round Moulding, 1¼"	118	Lin.ft.	.05	5.
Picture Moulding, 1" x 1-3/4"	42	Lin.ft.	.07	2.
Cornice Moulding, 4" x 4"	95	Lin.ft.	.36	34.
Scotia Moulding, 1"	18	Lin.ft.	.04	
Crown Moulding, 3 Member	15	Lin.ft.	.21	3.
Roofing - Slate on Bldg. Paper	11.89	Sq.	24.00	285.
Flashing - Cement	27	Lin.ft.	.20	5.
Ridge Roll, G.I.	62	Lin.ft.	.60	37.
Leaders, G.I., 4"	35	Lin.ft.	.50	17.
Gutter, G.I.	27	Lin.ft.	.50	13.
Galv.Iron Siding,	47	Sq.ft.	.18	8.
Skylight, Flat, 1'3" x 1'0"	1	No.	4.00	4.
" " 3'0" x 4'0"	1	No.	10.95	10.
Ventilator, 12" Dia., G.I.	1	No.	10.00	10.
Doors, Glazed, 3'2" x 7'8"	1	No.	48.81	48.
" " 3'8" x 7'0"	1	No.	51.81	51.
" Batt. 3'8" x 7'4"	1	Pr.	38.70	38.
" Panel, with Pilot Doors, circ. Head, 11'0" x 10'6"	1	Pr.	175.50	175.
" Gl. 3'4" x 7'2"	1	No.	48.89	48.
" Bat. 2'6" x 6'6"	1	No.	19.90	19.
" Panel 2'3" x 6'6"	1	No.	23.78	23.
" " 2'0" x 7'6"	1	No.	25.33	25.
" " 3'0" x 7'0"	1	No.	26.18	26.
" " 2'5" x 7'0"	1	No.	25.09	25.
" Bat. 2'8" x 8'0"	1	No.	26.00	26.
Windows, D. H.3'2" x 5'8"	8	No.	37.60	300.
" D. H.3'2" x 5'8" No Trim	8	No.	32.35	258.
" Fixed 12'3" x 2'6" & Pivoted	1	No.	52.40	52.
" Case, 1'7" x 1'9"	1	No.	10.25	10.
" " 2'0" x 2'4"	1	No.	10.25	10.
" Sliding3'2" x 4'0"	1	No.	6.10	6.
" Fixed 2'8" x 2'0"	1	No.	3.55	3.
Trap Doors,Bat.3'0"x 4'0"	1	No.	5.60	5.
" " " 2'6" x 3'6" G.I.Cov'd	1	No.	5.50	5.
" " " 1'7" x 2'0"	1-	No.	3.90	3.
" " " 2'9" x 3'0"	1	No.	6.50	6.
" " " 4'0" x 4'0"	1	Pr.	10.75	10.
Hardware				55.
Stairs, 2'8" Wide, 16 Treads,	1	No.	41.50	41.
" 1'1" " 5 "	1	No.	8.00	8.
" 4'0" " 3 "	1	No.	13.00	13.

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

TIN & PAINT SHOP

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
nting, Lead & Oil, 2 Coats	732	Sq.ft.	.0229	16.76
nting, Lead & Oil, 3 Coats	5326	Sq.ft.	.0422	234.76
nishing,	833	Sq.ft.	.054	44.98
d Water Paint	43.45	Sq.ft.	.02	86.90
ffold				150.00
bing				272.22
ing				100.38
Piping				136.96
tric				47.15
				11098.17
FIELD OVERHEAD - 7%				776.87
				11875.04
BUILDING CONTRACTOR'S PROFIT - 10%				1187.50
TOTAL COST -				13062.54

3476

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

ENGINE AND BOILER HOUSE

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Dry	345	Cu.Yd.	1.00	345.00
Excavation, Wet	20	Cu.Yd.	2.50	50.00
Backfill	33	Cu.Yd.	.60	19.80
Haul	332	Cu.Yd.	1.10	365.20
Piles	82	No.	12.58	1031.56
Pile Capping - Lumber - 12"	4.992	M.B.M.	111.00	554.11
Brickwork, Common	153.111	M.	49.55	7586.68
Concrete Floor, 1-3-5	17	Cu.Yd.	10.69	181.73
Bluestone - Sills, Lintels, etc.	102	Cu.Ft.	5.80	591.60
Bluestone - Flagging	183	Sq.Ft.	.36	65.88
Ornamental Iron				818.76
Lumber, 12" - Y.P.	1.44	M.B.M.	101.60	146.30
Lumber, 10" - Y.P.	3.12	M.B.M.	99.60	310.75
Lumber, 8" - Y.P.	.032	M.B.M.	95.30	3.05
Lumber, 4" - Y.P.	.366	M.B.M.	95.30	25.38
Lumber, 1" x 3-1/2" T&G	.589	M.B.M.	125.65	74.01
Lumber, 1" x 10" T&G	2.232	M.B.M.	73.05	163.05
Lumber, 1" x 3" T&G Ceiling	.773	M.B.M.	145.65	112.59
Lumber, 1" x 4-1/2" T&G Ceiling	.754	M.B.M.	116.60	87.93
Lumber, 2" x 2" Bridging	84	Lin.Ft.	.045	3.78
Lumber, 2" x 3" Furring	433	Lin.Ft.	.08	34.56
Lumber, 1" x 2" Furring	440	Lin.Ft.	.05	22.00
Lumber, 1/2" x 1" Furring	1740	Lin.Ft.	.045	78.30
Moulding, 6"	109	Lin.Ft.	.24	26.16
Wainscot, 1" x 4-1/2" T&G B.	100	Sq.Ft.	.13	13.00
Wainscot Cap - 2 member	198	Lin.Ft.	.16	31.68
Base, 1" x 7"	198	Lin.Ft.	.26	51.48
Windows, D.H., 3'6" x 6'0"	13	No.	38.35	498.55
Windows, D.H., 3'6" x 8'0"	2	No.	45.30	90.60
Doors, Gl.with Trans., 6'2"x10'2"	1	Pr.	109.65	109.65
Doors, Trimmed Openings only, 2'8" x 6'9"	1	No.	18.50	18.50
Doors, Trimmed Openings only, 3'0" x 6'9"	1	No.	18.50	18.50
Doors, Trimmed Openings only, 2'8" x 6'0"	2	No.	17.00	34.00
Doors, Trimmed Openings only, 2'0" x 4'0"	1	No.	12.50	12.50
Doors, Paneled, 2'8" x 6'9"	1	No.	32.16	32.16
Hardware				5.20
Cast Iron Gutter	68	Lin.Ft.	2.14	145.52
Plastering on Wood Lath	292	Sq.Yd.	1.80	525.60
Plaster Cornice	89	Lin.Ft.	1.00	89.00

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

ENGINE AND BOILER HOUSE

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Painting, Lead and Oil, 3 Coats	3008	Sq.Ft.	.0432	126.94
Painting - Whitewash	945	Sq.Ft.	.02	18.90
Scaffold				225.00
Plumbing				97.60
Heating				64.37
Gas Piping				95.59
Electric				82.54
				15083.19
Field Overhead 7%				1055.82
				16139.01
Building Contractor's Profit 10%				1613.90
TOTAL COST			-	$17752.91

3478

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

EXHAUSTER & MACHINE SHOP

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Wet.	48	Cu.Yd.	1.50	72.00
" Dry	272	Cu.Yd.	1.00	272.00
Backfill	165	Cu.Yd.	.60	99.00
Haul	155	Cu.Yd.	1.10	170.50
Sheet Piling, 7'0" Deep	347	Lin.ft.	4.68	1623.96
Piles,	70	No.	12.58	880.60
Pile Capping, Lumber, 10"	2.267	M.B.M.	109.00	247.10
Brickwork, Com.	86.226	M.	49.55	4272.50
Dentil Courses & Corbel Courses	120	Lin.ft.	.30	36.00
Mason Centers	10	Sq.ft.	.263	2.63
Bluestone Sills & Lintels	56	Sq.ft.	5.80	324.80
" Water Table	40	Cu.ft.	5.80	232.00
" Coping	3	Cu.ft.	5.50	16.50
Lumber, 12" Y.P.	4.306	M.B.M.	101.60	437.49
" 10" "	1.533	M.B.M.	99.60	152.77
" 8" "	1.163	M.B.M.	95.30	110.83
" 6" "	1.902	M.B.M.	95.30	181.28
" 4" "	.38	M.B.M.	95.30	36.21
" Truss, 10" Y.P.	.453	M.B.M.	114.60	51.91
" " 8" "	.341	M.B.M.	110.30	37.61
Flooring, 1 1/16" x 3 1/2" T. & G. Y.P.	.604	M.B.M.	142.15	85.86
" 1 1/16" x 10" Sq.Edge "	1.068	M.B.M.	99.60	106.37
" 1 1/16" x 12" " "	.563	M.B.M.	101.60	57.21
" 1 1/16" x 4" T. & G. "	3.455	M.B.M.	136.60	471.83
Partition Sheathing, 7/8" x 9 1/2" T. & G., B.C.B.	.461	M.B.M.	78.05	35.98
Ceiling, 7/8" x 9 1/2" " "	1.188	M.B.M.	86.05	102.27
Roofing, 1" x 10" Sq. Edge, N.C.P.	3.9	M.B.M.	81.60	318.24
Beam Casing, 1" x 12"	153	Lin.ft.	.28	42.84
" " 1" x 8"	76	Lin.ft.	.22	16.72
Quarter,Round, Moulding, 1"	81	Lin.ft.	.03	2.43
Moulding, 1/2" x 1/2"	36	Lin.ft.	.03	1.08
Crown Moulding, 4"	97	Lin.ft.	.13	12.61
" " 1 1/2" x 3"	41	Lin.ft.	.10	4.10
" " 3" x 5"	41	Lin.ft.	.20	8.20
Box Cutter, Wood, 4" x 4"	41	Lin.ft.	.25	10.25
Roofing, Slate, with Paper	18.6	Sq.	24.00	446.40
Roofing, Rubberoid	756	Sq.ft.	.04	30.24
Gutter Lining, G.I.	44	Sq.ft.	.35	15.40
Gutter, G.I.	119	Lin.ft.	2.14	254.66
Ridge Roll, G.I.	60	Lin.ft.	.60	36.00
Leaders, G.I., 4"	36	Lin.ft.	.50	18.00
" " 3"	8	Lin.ft.	.45	3.60
" " 5"	25	Lin.ft.	.55	13.75

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

EXHAUSTER & MACHINE SHOP

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
ors, Batton, 4'10" x 7'8"	1	Pr.	42.50	42.50
" 4'10" x 7'8" Seg.Head.	2	Pr.	56.00	112.00
" Paneled 4'10" x 7'8"	1	Pr.	41.00	41.00
rimed Opening, 10'3" x 8'0"	1	No.	15.00	15.00
or, Batton, 3'4" x 6'10"	1	No.	22.30	22.50
" Panel 3'0" x 7'0"	1	No.	23.00	23.00
indows, B.E., 3'4" x 6'8"	2	No.	32.55	65.10
" " 3'4" x 6'8" No Trim	18	No.	28.00	504.00
" Fixed 3'4" x 2'0"	2	No.	9.25	18.50
ardware				13.15
airs, 2'10" Wide, 16 Treads	1	No.	82.00	82.00
" 1'5" " 6 "	1	No.	7.00	7.00
" 3'5" " 3 "	1	No.	19.50	19.50
" 3'4" " 2 "	1	No.	10.00	10.00
" 3'6" " 14 "	1	No.	51.00	51.00
air Platform, 4'8" x 4'4"	1	No.	15.25	15.25
st Platform	90	Sq.ft.	.15	13.50
ndrail 3'8" High, & Newels	33.5	Lin.ft.	1.23	39.98
scellaneous Iron				366.39
inting, Cold Water	9254	Sq.Ft.	.02	185.08
" Lead & Oil, 3 Coats	1764	Sq.Ft.	.0423	74.44
rnishing	160	Sq.Ft.	.054	8.64
affold				180.00
mbing				183.03
ating				155.04
Piping				101.56
ectric				644.91
				14336.37
FIELD OVERHEAD - 7%				1002.85
				15339.23
BUILDING CONTRACTOR'S PROFIT - 10%				1532.92
TOTAL COST				16863.14

3480

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

ENGINE HOUSE

COST AS OF JUNE 1, 1923

	QUANTITY	UNIT	UNIT PRICE	TOTAL CAST
Excavation	104	Cu.Yd.	1.14	118.56
Backfill	37	Cu.Yd.	.60	22.20
Haul	67	Cu.Yd.	1.10	73.70
Piles	16	No.	12.58	201.28
Sheet Piling, 7'0"	76	Lin.ft.	4.68	355.68
Concrete Pile Capping	7	Cu.Yd.	10.69	74.83
" " " Forms	114	Sq.ft.	.106	12.08
Brickwork, Com.	16.59	M.	49.55	822.03
Dentil Courses	20	Lin.ft.	.25	5.00
Bluestone Sills & Lintels.	12	Cu.ft.	5.80	69.60
Mason Centers	10	Sq.ft.	.263	2.63
Roofing, Tin,	331	Sq.ft.	.35	115.85
Flashing, G.I.	47	Sq.ft.	.25	11.75
Galv.Iron Cutter, 4" x 8"	20	Lin.ft.	.60	12.00
Leaders, G.I., 3"	18	Lin.ft.	.45	8.10
Skylight, 2'10" x 3'10"	1	No.	13.00	13.00
Wood Cornice	20	Lin.ft.	.45	9.00
Windows, D. H., 3'6" x 7'0"	1	No.	38.00	38.00
" Fixed 2'6" x 3'6"	1	No.	8.00	8.00
Doors, Glazed, Seg.Head, 7'0" x 10'4"	1	Pr.	143.00	143.00
" " with Tran. 3'0" x 7'0"	1	No.	45.10	45.10
" Batten 2'0" x 3'5"	1	No.	7.35	7.35
Trimmed Opening 8'0" x 10'4"	1	No.	11.60	11.60
Lumber, 10" Spruce	.425	M.B.M.	94.10	39.99
" 8" "	.38	M.B.M.	87.50	33.25
" 6" "	.18	M.B.M.	86.50	15.57
Flooring, 1" x 3½" T. & G.	.294	M.B.M.	142.15	41.79
Roofers, 1" x 8" T. & G.	.397	M.B.M.	72.30	28.70
Ceiling, 7/8" x 4½" T.& G. B.	.395	M.B.M.	89.60	35.38
Moulding, 1" x 5"	80	Lin.ft.	.08	4.80
Base, 1-1/8" x 10" 2-Member	35	Lin.ft.	.27	9.45
Stairs, 1'10" Wide, 7 Treads,	1	No.	8.50	8.50
Hardware				15.00
Ore, Iron				21.50
Painting, Lead & Oil, 2 Coats	409	Sq.ft.	.0229	9.37
" Cold Water	759	Sq.ft.	.02	15.18
Varnishing	643	Sq.ft.	.054	34.72
Scaffold				100.00
Gas Piping				35.94
				2629.35
FIELD OVERHEAD - 7%				184.06
				2813.41
BUILDING CONTRACTOR'S PROFIT - 10%				281.35
TOTAL COST -				3094.76

3481

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

BLACKSMITH & CARPENTER SHOP

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Dry	177	Cu.Yd.	1.00	177.00
" Wet	43	Cu.Yd.	2.50	107.50
Backfill	162	Cu.Yd.	.60	97.20
Haul	58	Cu.Yd.	1.10	63.80
Piles	62	No.	12.58	779.96
Pile Capping, Lumber, 12"	2.176	M.B.M.	111.00	241.54
" " " 8"	.043	M.B.M.	103.00	4.43
Brickwork, Com.	88.179	M.	49.55	4369.27
Rental Courses	111	Lin.ft.	.25	27.75
Limestone Sills, etc.	78	Cu.ft.	5.80	452.40
Lumber, 12" Y.P.	4.516	M.B.M.	101.60	458.83
" 10" Truss, Y.P.	.9	M.B.M.	114.60	103.14
" 8" " "	.808	M.B.M.	110.30	89.12
" 6" " "	1.589	M.B.M.	110.30	175.27
" 4" "	.345	M.B.M.	95.30	32.88
" 10" "	.03	M.B.M.	99.60	2.99
Roofers, 1" T.& G.	2.847	M.B.M.	71.60	203.85
" 1½" T.& G.	2.6	M.B.M.	76.60	199.16
Bridging, 1" x 1½"	2516	Lin.ft.	.035	88.06
Floor, 3" Plank	1.371	M.B.M.	90.30	123.80
Wood Lintels, 8" Lumber,	.303	M.B.M.	100.30	30.35
Wood Lintels, 3"	.039	M.B.M.	100.30	3.91
Windows, D.H., 3'6" x 6'0"	13	No.	23.00	299.00
Doors, Bat. 4'6" x 8'0"	1	No.	34.60	34.60
" " 5'6" x 8'0"	1	No.	39.00	39.00
" " 4'0" x 8'4"	1	No.	32.75	32.75
Hardware				11.60
Roofing, Slate & Paper Under Slate	20.18	Sq.	24.00	484.32
Flashing, G.I.	147	Sq.ft.	.55	51.45
Gutter, G.I.	116	Lin.ft.	2.14	248.24
Leaders, G.I. 4"	60	Lin.ft.	.50	30.00
Ornamental Iron				602.11
Painting, Lead & Oil, 3 Coats	1312	Sq.ft.	.0422	55.37
Whitewash	8416	Sq.ft.	.02	168.32
Scaffold				300.00
Plumbing				176.16

3482

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

BLACKSMITH & CARPENTER SHOP

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Heating				216.17
Gas Piping				98.77
Electric				155.68
				10725.86
FIELD OVERHEAD - 7%				750.01
				11476.87
BUILDING CONTRACTOR'S PROFIT - 10%				1147.67
TOTAL COST -				12624.34

CONSOLIDATED GAS COMPANY

14TH STREET WORKS -

CONDENSER HOUSE - "7-1"

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Wet	99.	Cu.Yd.	2.50	247.50
Excavation, Dry	424	Cu.Yd.	1.00	424.00
Backfill	189	Cu.Yd.	.60	113.40
Sand	334	Cu.Yd.	1.10	367.40
Sheet Piling, 10'0" Deep	200	Lin.Ft.	5.30	1060.00
Sheet Piling, 6'0" Deep	163	Lin.Ft.	4.68	762.84
Piles	74	No.	12.58	930.92
Pile Capping - Lumber - 10"	2.347	M.B.M.	109.00	255.82
Brickwork, Common	163.078	M.	49.55	8030.96
Corbel Courses	106	Lin.Ft.	.15	15.90
Mason Centers	24	Sq.Ft.	.263	6.31
Structural Steel	12414	Lb.	.0623	773.39
Ornamental Iron				697.00
Bluestone - Sills, etc.	103	Cu.Ft.	5.80	591.60
Bluestone - Coping and Caps	72	Cu.Ft.	5.50	396.00
Bluestone - Flagging	1668	Sq.Ft.	.36	600.48
Lumber, 8" - Y.P.	.23	M.B.M.	95.30	21.92
Lumber, 6" - Y.P.	.156	M.B.M.	95.30	14.87
Lumber, 6" D4S - Y.P.	1.545	M.B.M.	100.30	154.96
Roofers, 1-1/4" x 10" rough N.C.P.	.131	M.B.M.	81.60	10.69
Roofing, Slate	20.57	Sq.	23.00	473.11
Flashing, G.I.	50	Sq.Ft.	.35	17.50
Flashing, Cement	37	Sq.Ft.	.20	7.40
Ridge Roll	53	Lin.Ft.	.60	31.80
Leaders, 4" G.I.	22	Lin.Ft.	.50	11.00
Skylight, Steel Frame, Wire Glass, 6'0" x 13'0"	1	No.	93.60	93.60
Wood Cornice	41	Lin.Ft.	.08	3.28
Moulding - Nosing 1-1/2" x 2"	18	Lin.Ft.	.06	1.08
Moulding - Nosing 1-1/2" x 3-1/2"	23	Lin.Ft.	.09	2.07
Facia, 1" x 6"	18	Lin.Ft.	.10	1.80
Facia, 1" x 10"	23	Lin.Ft.	.16	3.68
Rotia Mldg., 3/4"	23	Lin.Ft.	.03	.69
Flat Flooring, 1-1/4" x 4"	1505	Sq.Ft.	.08	120.40
Doors, Paneled, 5'2 x 8'10"	1	Pr.	59.10	59.10
Windows, D.H., 3'9" x 8'0"	9	No.	44.80	403.20
Windows, Fixed, 3'9" x 4'4"	3	No.	18.90	56.70
Wood Treads on Steel Stairs, 2'10" Wide	5	No.	.70	3.50
Wood Treads on Steel Stairs, 3'6" Wide	6	No.	.85	5.10
Wood Treads on Steel Stairs, 3'2" Wide	4	No.	.85	3.40

3484

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

CONDENSER HOUSE - "F-1"

COST AS OF JUNE 1ST, 1923

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Painting, Lead and Oil, 3 Coats	1071	Sq.Ft.	.0422	45.20
Painting, Cold Water	5549	Sq.Ft.	.02	110.98
Scaffold				275.00
Plumbing				105.35
Heating				104.45
Hardware				1.20
Gutter, G.I.	110	Lin.Ft.	2.14	235.40
				17651.85
Field Overhead 7%				1235.64
				18887.59
Building Contractor's Profit 10%				1888.76
TOTAL COST		-		$20776.35

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

SCRUBBER - "H"

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation	108	Cu.Yd.	1.14	123.12
Backfill	79	Cu.Yd.	.60	47.40
Sand	29	Cu.Yd.	1.10	31.90
Piles	43	No.	12.58	540.94
Pile Capping, Lumber, 10"	1.043	M.B.M.	109.00	113.69
Sheet Piling, 7'6" Deep	157.5	Lin.Ft.	4.68	737.10
Brickwork, Common	33.747	M.	49.55	1672.16
Brick Floor	43	Sq.Yd.	2.29	98.47
Limestone - Sills, Etc.	52	Cu.Ft.	5.80	301.60
Lumber, 10" - Y.P.	1.295	M.B.M.	99.60	128.98
Lumber, 6" - Y.P.	.246	M.B.M.	95.30	23.44
Lumber, 4" - Y.P.	.354	M.B.M.	95.30	33.74
Roofers - 1" T&G	.773	M.B.M.	71.60	55.35
Windows, Pivoted, 4'0" x 5'0"	5	No.	29.80	149.00
Road Gates, 8'0" x 9'0"	1	Pr.	81.60	81.60
Door, GI. with Tran., 4'0" x 12'0"	1	No.	51.00	51.00
Roofing, Tar and Gravel	669	Sq.Ft.	.13	86.97
Flashing, G.I.	113	Sq.Ft.	.25	28.25
Siding, G.I.	546	Sq.Ft.	.18	98.28
Structural Steel	2114	Lb.	.0625	131.70
Ornamental Iron				64.02
Hardware				8.15
Painting, Lead and Oil, 3 Coats	440	Sq.Ft.	.0422	18.57
Whitewashing	2415	Sq.Ft.	.02	48.30
Scaffold				100.00
				4773.73
Field Overhead 7%				334.16
				5107.89
Building Contractor's Profit 10%				510.79
TOTAL COST		-		$5618.68

3486

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

CONDENSER HOUSE "J"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation	224	Cu.Yd.	1.25	280.00
Backfill	158	Cu.Yd.	.60	94.80
Haul	66	Cu.Yd.	1.10	72.60
Piles	54	No.	12.58	679.32
Pile Capping, Lumber, 10"	2.267	M.B.M.	109.00	247.10
Sheet Piling, 8'0" Deep	272	Lin.ft.	4.60	1272.98
Brickwork, Com.	63.273	M.	49.55	3135.18
Mason Centers	3	Sq.ft.	.263	.79
Bluestone Water Table	72	Cu.ft.	5.00	417.00
" Sills	26	Cu.ft.	5.00	150.00
" Coping	17	Cu.ft.	5.50	93.50
" Curb,	72	Cu.ft.	2.55	183.60
" Flagging	386	Sq.ft.	.36	138.96
Brick Floor,	.15	M.	2.29	34.35
Roofing, Slate	32.42	Sq.	23.00	745.66
Flashing, G.I.	136	Sq.ft.	.35	47.60
Skylights, 2'0" x 5'6"	2	No.	11.00	22.00
Windows, D.H., 4'3" x 6'0"	1	No.	33.95	33.95
Lumber, 6" Spruce	.144	M.B.M.	86.50	12.46
" 4" "	.02	M.B.M.	86.50	1.73
Siding, 1½" x 10"	.324	M.B.M.	101.60	32.92
Base, 1½" x 10"	12	Lin.ft.	.30	3.60
				1183.71
Orn. Iron				313.62
Struct. Steel	5034	Lb.	.0623	4.00
Hardware				91.12
Painting, Cold Water,	4556	Sq.ft.	.02	2.11
Painting, Lead & Oil, 3 Coats	50	Sq.ft.	.0422	3.11
Painting, Lead & Oil, 2 Coats,	136	Sq.ft.	.0229	200.00
Scaffold				171.74
Plumbing				
				9670.89
FIELD OVERHEAD - 7%				676.96
				10347.85
BUILDING CONTRACTOR'S PROFIT - 10%				1034.79
TOTAL COST -				11382.64

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

RETORT HOUSE "K"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Wet	474	Cu.Yd.	2.50	1185.00
" Dry	2050	Cu.Yd.	1.00	2050.00
" Hauled	614	Cu.Yd.	1.10	675.40
Backfill	1910	Cu.Yd.	.60	1146.00
Sheet Piling, 8'0" Deep	3608	Lin.ft.	4.68	16885.44
Piles, Wood,	760	No.	12.58	9560.80
Pile Capping, 10" x 12"	27.4	M.B.M.	111.00	3041.40
Concrete 1-2-4 Rein. Footings	16	Cu.Yd.	10.69	171.04
" 1-3-5 Floor	2	Cu.Yd.	10.69	21.38
Cement Finish, 1" Thick	137	Sq.ft.	.105	14.39
Forms. Footing	153	Sq.ft.	.106	16.22
Floor, Belgian Block	578	Sq.Yd	5.21	3011.38
Brickwork, Com.	862.239	M.	49.55	42723.94
" Corbel & Dentil	43	Lin.ft.	.30	12.90
" Corbel, 1 Course	420	Lin.ft.	.05	21.00
Brick Floor, Laid on Edge	2926	Sq.Yd.	2.29	6700.54
Mason Centers	726	Sq.Yd.	.263	190.94
Limestone Sills, Lintels, W.T.	320	Cu.ft.	5.80	1856.00
" Bondstone & Caps	216	Cu.ft.	4.25	918.00
" Coping	230	Cu.ft.	5.50	1265.00
" Flagstone	7571	Sq.ft.	.36	2725.56
Brownstone - Caps & bondstones	244	Cu.ft.	4.25	1037.00
Limestone - Console,	4	Cu.ft.	6.50	26.00
Reinforcement - Steel Rails	4140	Lbs.	.047	194.58
Misc. Iron				11543.16
Structural Steel	503144	Lbs.	.0623	31345.87
C.I. Columns	73700	Lbs.	.071	5232.70
Lumber, Truss, 10" Y.P.	.693	M.B.M.	114.60	79.42
" 12" Y.P.	.432	M.B.M.	101.60	43.89
" 8" "	3.869	M.B.M.	95.30	368.72
" 6" "	2.732	M.B.M.	95.30	260.36
" 4" "	2.158	M.B.M.	95.30	205.66
Sheathing, 1" x 12" Sq. Edge	1.561	M.B.M.	86.60	135.18
" 2" x 10" "	.39	M.B.M.	90.30	35.22
" 1" x 10" T. & G.	1.07	M.B.M.	73.05	78.16
" 1½" x 9" "	5.031	M.B.M.	81.05	407.76
" 1" x 4½"	.191	M.B.M.	76.60	14.63
" 1" x 4½" M. & B., C.B.	.073	M.B.M.	81.60	5.96
Wainscot 1" x 4½" M. & B., C.B.	.087	M.B.M.	89.60	7.80
Floor, 1" x 10" Sq. Edge	.152	M.B.M.	86.60	13.16
" 1½" x 8" T. & G.	.301	M.B.M.	81.05	30.88

3488

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

RETORT HOUSE "K"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Door, Single, Wood Panel, Glazed, Wire Glass, 2'6" x 7'0"	1	No.	35.00	35.00
Door, Single, Wood Panel, Semi-Circ. Transoms, 3'8" x 9'4"	1	No.	68.50	68.50
Door, Single, Wood Panel, with Tran., 2'5" x 0'7" - 2'5" x 6'2"	1	No.	30.00	30.00
Door, Single, Wood Bat. 2'6" x 6'6"	4	No.	13.00	52.00
" " " " 2'3" x 6'0"	1	No.	12.90	12.90
Door, Single, Wood Panel, Tin Clad one side, 2'9" x 7'0"	1	No.	21.34	21.34
Door, Double, Wood Batt., Folding, Fixed Transoms, 1'6" x 9'6" 9'8" x 9'0"	1	Pr.	82.95	82.95
Door, Vertical Sliding, Corr. G.I., Wood Battens, 9'0" x 7'4"	2	No.	54.10	108.20
Door, Single, Wood Batton, Folding, 7'6" x 9'0"	1	No.	37.40	37.40
Doors, Double, Corr. G.I., Wood Battens, 8'8" x 9'8"	3	No.	66.70	200.10
Windows, D. H., 4'8" x 6'0"	3	No.	29.50	88.50
" " 7'6" x 6'8" Mull.	2	No.	49.60	99.20
" " 3'6" x 7'3"	1	No.	28.80	28.80
" " 2'6" x 6'6"	2	No.	31.10	62.20
" " 4'0" x 6'6"	1	No.	28.00	28.00
" Fixed Sash 2'0" x 2'8"	1	No.	13.60	13.60
" Sliding 2'10" x 2'8"	1	No.	13.60	13.60
" Double, Fixed Sash, Mullioned, 9'3" x 4'0"	1	No.	21.40	21.40
" Fixed Sash, No Frame.				
4'0" x 6'0"	1	No.	12.60	12.60
4'0" x 6'0"	1	No.	12.60	12.60
3'6" x 5'6"	2	No.	11.00	22.00
4'6" x 5'4"	1	No.	13.00	13.00
Corr. G.I.	3669	Sq.ft.	.22	807.18
Galv. Iron	392	Sq.ft.	.18	70.56
Roofing, Tar & Felt	6106	Sq.ft.	.13	793.78
" Slate	549.41	Sq.	23.00	12638.43
Paper Under Slate on Wood	1419	Sq.ft.	.01	14.19
Ridge Roll, G.I.	43	Lin.ft.	.60	25.80
Gutter, G.I., 4" 1/2 Round	12	Lin.ft.	.40	4.80
" Wood, 10" x 12"	46	Lin.ft.	.45	20.70
Flashing, G.I.	854	Sq.ft.	.35	298.90

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

RETORT HOUSE "K"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Leaders, 4" G.I.	38	Lin.ft.	.50	19.00
Leaders, 6" G.I.	18	Lin.ft.	.60	9.60
Leaders, Box, G.I.	2	No.	1.00	2.00
Ridge Roll, Cast Iron, 12"	766	Lin.ft.	.64	490.24
Valley, Cast Iron, 11" x 3'0"	729	Lin.ft.	3.76	2741.04
Valley Cast Iron, 11" x 3'3"	22	Lin.ft.	4.08	89.76
Gutter, Cast Iron	362	Lin.ft.	2.14	774.68
Hardware				15.46
Truss Rods,	85	Lb.	.15	12.75
Painting, 3 Coats, L & O	4374	Sq.ft.	.0422	184.58
" 2 Coats, "	9314	Sq.ft.	.0229	213.29
" 3 " Cold Water	26968	Sq.ft.	.02	539.36
Scaffold				1200.00
Plumbing				1278.06
Gas Piping				996.38
Electric				3002.32
				172563.19
FIELD OVERHEAD - 7%				12079.42
				184642.61
BUILDING CONTRACTOR'S PROFIT - 10%				18464.26
TOTAL COST -				203106.68

3490

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

COAL POCKET - "L"

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Wet	59	Cu.Yd.	2.50	147.50
Excavation, Dry	546	Cu.Yd.	1.14	622.44
Excavation, Hauled	160	Cu.Yd.	1.10	176.00
Backfill	445	Cu.Yd.	.60	267.00
Sheet Piling, 8'0" Deep	676	Lin.Ft.	4.68	3163.68
Piles, Wood	128	No.	12.58	1610.24
Pile Capping, 10" x 12"	6.16	M.B.M.	111.00	683.76
Concrete, 1-3-5, Footing	15	Cu.Yd.	10.69	160.35
Concrete, 1-3-5, Pier	1	Cu.Yd.	10.69	10.69
Concrete, 1-3-5, Wall	10	Cu.Yd.	10.69	106.90
Concrete, 1-3-5, Floor	5	Cu.Yd.	10.69	53.45
Cement Finish, 1" Th.	331	Sq.Ft.	.105	34.76
Forms, Footing	285	Sq.Ft.	.106	30.21
Forms, Pier	126	Sq.Ft.	.263	33.14
Forms, Wall	558	Sq.Ft.	.263	146.75
Floor, Belgian Block	399	Sq.Yd.	4.21	1679.79
Brickwork, Common	100.296	M.	49.55	4968.67
Brickwork - Corbel and Dentil Cornice	218	Lin.Ft.	.35	76.30
Brick Floor - On Edge	72	Sq.Yd.	2.29	164.88
Mason Centers	243	Sq.Ft.	.253	63.81
Bluestone - Coping	10	Cu.Ft.	5.50	55.00
Bluestone - Cap Stones	27	Cu.Ft.	5.80	156.60
Bluestone - Flag Stones	697	Sq.Ft.	.36	250.92
Structural Steel	14218	Lb.	.0623	885.79
Cast Iron Columns	8150	Lb.	.071	578.65
Miscellaneous Iron				691.73
Lumber, Truss - 10" Y.P.	4.14	M.B.M.	114.60	474.44
Lumber, Truss - 10" x 10" x 31'0" YP	5.942	M.B.M.	119.60	710.68
Lumber, Truss - 8" Y.P.	3.925	M.B.M.	110.30	432.93
Lumber, D4S 6" Y.P.	.343	M.B.M.	100.30	34.40
Lumber, D4S 4" Y.P.	.661	M.B.M.	100.30	66.30
Lumber, 12" Y.P.	.504	M.B.M.	101.60	51.21
Lumber, 10" Y.P.	2.235	M.B.M.	99.60	222.61
Lumber, 8" Y.P.	7.53	M.B.M.	95.30	717.61
Lumber, 6" Y.P.	.479	M.B.M.	95.30	45.65
Lumber, 4" Y.P.	.954	M.B.M.	95.30	90.92
Cleats, 2" x 2" Y.P.	120	Lin.Ft.	.07	8.40
Floor, 3" x 10" Plank Y.P.	.274	M.B.M.	94.60	25.92
Floor, 2" x 10" Plank Y.P.	1.351	M.B.M.	94.60	127.80
Floor, 2" x 6" Plank Y.P.	.988	M.B.M.	90.20	89.12
Sheathing, 1" x 6" T&G	.23	M.B.M.	71.60	16.47
Sheathing, 1" x 3-1/4" T&G	.068	M.B.M.	135.65	9.22
Sheathing, 1" x 10" Sq. Edge	9.113	M.B.M.	86.80	789.10

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

COAL POCKET - "L"

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Cornice, Wood, 1" x 6"	128	Lin.Ft.	.09	11.52
Window, Double, Sliding Sash, Mullioned - 3'0" x 7'0"	2	No.	22.20	44.40
Window, Semi-Circ. Fixed Sash, M. Frame - 9'8" Dia.	13	No.	28.00	364.00
Windows, Hinged Sash, 2'9" x 2'9"	7	No.	9.70	67.90
Windows, Fixed Sash, 3'0" x 5'0"	2	No.	12.80	25.60
Door, Wood, Batten, Sliding - Semi-Circular Sash 9'8" Dia., Pilot Door 2'6"x5'9" -10'0"x12'6"	1	No.	93.00	93.00
Door, Wood, Batten, Sliding - Semi-Circ. Sash 9'8" Dia., 10'0"x12'6"	2	No.	90.00	180.00
Door, Single, Wood, Batten, 2'6" x 6'6"	1	No.	15.30	15.30
Door, Single, Wood, Batten, 4'0" x 7'8"	1	No.	26.00	26.00
Skylight, Wood, Flat, 3'0"x3'0"	3	No.	13.00	39.00
Stairs, Wood, Open Risers, 3'0" Wide, 5 Treads	1	No.	17.60	17.60
Stairs, Wood, Open Risers, 10'0" Wide - with handrail - 10 Treads	1	No.	47.00	47.00
Stairs, Wood, Open Risers, 1'9" Wide - 22 Treads	1	No.	55.00	55.00
Posts, 3" x 3" x2'8"	6	No.	3.00	18.00
Rail and Brackets	162	Lin.Ft.	.185	29.97
Rail and Brackets 2'8" High	60	Lin.Ft.	.18	10.80
Corr. G.I.	7054	Sq.Ft.	.22	1551.88
Corr. G.I. - Asbestos Covered	1613	Sq.Ft.	.30	483.90
Flashing, G.I.	186	Sq.Ft.	.35	65.10
Ridge Roll, G.I.	217	Lin.Ft.	.60	130.20
Leader, G.I., 4"	42	Lin.Ft.	.50	21.00
Roofing, Slate	40.76	Sq.	23.00	937.48
Paper under Slate	4076	Sq.Ft.	.01	40.76
Cast Iron Gutter	368	Lin.Ft.	3.14	573.52
Cast Iron Valley	224	Lin.Ft.	3.52	788.48
Nuts, Bolts, Etc.	2914	Lb.	.15	437.10
Hardware				26.25
Painting, 3 Coats, Lead and Oil	2450	Sq.Ft.	.0422	103.39
Painting, 2 Coats, Lead and Oil	13894	Sq.Ft.	.0229	313.59
Scaffold				325.00

3492

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

COAL POCKET - "L"

COST AS OF JUNE 1 ST., 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Electric				111.30
				27687.00
	Field Overhead 7%			1938.09
				29625.09
	Building Contractor's Profit 10%			2963.51
	TOTAL COST	-		$32587.60

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

GAS ENGINE HOUSE - "M"

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Dry	111	Cu.Yd.	1.00	111.00
Excavation, Hauled	69	Cu.Yd.	1.10	75.90
Backfill	42	Cu.Yd.	.60	25.20
Concrete, 1-3-5, Footing	3.5	Cu.Yd.	10.69	37.42
Forms, Footing	146	Sq.Ft.	.106	15.48
Brickwork, Common	12.915	M.	49.55	639.94
Limestone - Sills and Lintels	15	Cu.Ft.	5.80	87.00
Limestone - Coping	3	Cu.Ft.	5.50	16.50
Window Guards, Wire Mesh	12	Sq.Ft.	.70	8.40
Lumber, Truss, 12" - Y.P.	.328	M.B.M.	116.60	38.58
Lumber, 12" - Y.P.	.06	M.B.M.	101.60	6.10
Lumber, 8" - Y.P.	.764	M.B.M.	95.30	72.81
Lumber, 4" - Y.P.	.454	M.B.M.	95.30	43.27
Sheathing, 1" x 10", T&G	.745	M.B.M.	73.05	54.42
Sheathing, 1" x 2-1/3" - M& B	.361	M.B.M.	145.65	52.58
Ceiling, 1" x 4-1/2" - M&B	.059	M.B.M.	89.60	5.29
Flooring, 1" x 2-1/2" - T&G	.576	M.B.M.	157.65	90.81
Flooring, 1" - Sq. Edge	.084	M.B.M.	76.60	6.43
Facia, 1" x 12", Beaded	18	Lin.Ft.	.18	3.24
Facia, 1" x 9", Beaded	21	Lin.Ft.	.14	2.94
Moulding, 1" - 1/4 round	45	Lin.Ft.	.03	1.35
Window, D.H., 3'6" x 5'0"	2	No.	28.20	56.40
Window, D.H., 3'7" x 5'3"	1	No.	39.00	39.00
Window, D.H., 3'6" x 5'0"	1	No.	28.20	28.20
Doors, Double, Wood Panel, Glazed with Transom 1'9"x5'9" - 5'9"x7'6"	1	Pr.	59.60	59.60
Door, Single, Wood, Batten, 2'8"x7'0"	1	No.	15.95	15.95
Door, Single, Wood Panel, Glazed, 2'10" x 7'0"	1	No.	23.80	23.80
Door, Single, Wood, Batten, Trap 1'10" x 2'6"	1	No.	6.40	6.40
Skylight, Wood, Flat Roof, 4'0" x 4'6" x 1'2" High	1	No.	15.80	15.80
Skylight, Wood, Flat Roof, 3'0" x 4'0" x 1'2"High	1	No.	13.40	13.40
Wire Mesh, 1" Screen	18	Sq.Ft.	.50	9.00
Roofing, Tar Paper	621	Sq.Ft.	.015	9.33
Corr. G.I.	76	Sq.Ft.	.20	15.20
Flashing, G.I.	92	Sq.Ft.	.25	23.00
Hardware				2.80
Painting, 3 Coats, Lead and Oil	294	Sq.Ft.	.0422	12.41
Painting, 2 Coats, Lead and Oil	76	Sq.Ft.	.0229	1.74
Painting, 2 Coats, Cold Water	763	Sq.Ft.	.02	15.24
				3494

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

GAS ENGINE HOUSE - "A"

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Varnish	316	Sq.Ft.	.054	17.06
Scaffold				25.00
Heating				132.43
Gas Piping				40.74
				1934.95
Field Overhead 7%				135.45
				2070.40
Building Contractor's Profit 10%				207.04
TOTAL COST				$2277.44

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

BOILER HOUSE "N"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Dry	95	Cu.Yd.	1.25	118.75
" Hauled	19	Cu.Yd.	1.10	20.90
Backfill	76	Cu.Yd.	.60	45.60
Piles, Wood,	28	No.	12.58	352.24
Pile Capping, 12" x 12"	.864	M.B.M.	111.00	95.90
Brickwork, Com.	34.566	M.	49.55	1712.75
Beam Centers	14	Sq.ft.	.263	3.68
Limestone - Coping	14	Cu.ft.	5.50	77.00
" Sills, Lintels & W.T.	36	Cu.ft.	5.80	208.80
" Keystones	4	Cu.ft.	5.80	23.20
" Flagstones	207	Sq.ft.	.36	74.52
Lumber, 8" N.C.P.	.26	M.B.M.	79.60	20.70
" 4" "	.03	M.B.M.	79.60	1.59
Sheathing, 1" T. & G. N.C.P.	.356	M.B.M.	71.60	25.49
Structural Steel	431	Lb.	.0623	26.95
Checkered Floor Plate	2144	Lb.	.12	257.38
Misc. Iron				43.86
Door, Double, Folding, Wood Panel, G.I. Sheathed, Seg. Head, with Transoms, 7'8" x 7'8"	1	Set	67.30	67.30
Door, Single, Wood Bat. 3'6" x 4'10"	1	No.	14.30	14.30
Windows, D. H. 4'0" x 9'0"	1	No.	31.80	31.80
Ventilator, G.I., 21" Dia., 2'0" High	1	No.	10.00	10.00
Cornice, G.I., 9" x 12"	11	Lin.ft.	1.25	13.75
Roofing, Tar Paper	240	Sq.ft.	.015	3.60
Hardware				10.15
Painting, Lead & Oil, 3 Coats	273	Sq.ft.	.0423	11.52
Whitewash	1152	Sq.ft.	.02	23.04
Plumbing				58.04
Scaffold				110.00
				3460.61
FIELD OVERHEAD - 7%				242.24
				3702.85
BUILDING CONTRACTOR'S PROFIT - 10%				370.29
TOTAL COST -				4073.14

3496

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

COAL SHED - "T"

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Wet	377	Cu.Yd.	2.50	942.50
Excavation, Dry	2846	Cu.Yd.	1.14	3244.44
Excavation, Hauled	693	Cu.Yd.	1.10	762.30
Backfill	2530	Cu.Yd.	.60	1518.00
Sheet Piling, 8'0" Deep	4662	Lin.Ft.	4.68	21818.16
Piles, Wood	802	No.	12.58	10089.16
Pile Capping, 8" x 12"	16.208	M.B.M.	111.00	1799.09
Pile Capping, 8" x 8"	7.668	M.B.M.	103.00	789.80
Pile Capping, 10 x 10"	8.718	M.B.M.	109.00	950.36
Brickwork, Common	984.354	M.	49.55	48774.74
Brickwork, Dentil	724	Lin.Ft.	.25	181.00
Bluestone - Flagstones	2244	Sq.Ft.	.36	807.84
Bluestone - Sills and Lintels	105	Cu.Ft.	5.80	609.00
Bluestone - Cap Stones	259	Cu.Ft.	5.80	1502.20
Bluestone - Plinths	266	Cu.Ft.	5.80	1543.30
Brick Floor - on Edge	68	Sq.Yd.	2.29	155.72
Belgian Block Floor	736	Sq.Yd.	4.21	3098.56
Mason Centers	1929	Sq.Ft.	.263	507.33
Cast Iron Columns	186396	Lb.	.071	13234.12
Miscellaneous Iron				2802.27
Lumber, Truss - 12" Y.P.	31.97	M.B.M.	116.60	3727.70
Lumber, Truss - 10" Y.P.	19.61	M.B.M.	114.60	2247.31
Lumber, 12" - Y.P.	45.352	M.B.M.	101.60	4607.76
Lumber, 10" - Y.P.	36.84	M.B.M.	99.60	3649.34
Lumber, 8" - Y.P.	79.016	M.B.M.	95.30	7530.22
Lumber, 6" - Y.P.	7.56	M.B.M.	95.30	720.47
Floor - 2" Plank	54.83	M.B.M.	90.30	4933.09
Sheathing, 1" x 12" T&G	56.948	M.B.M.	74.80	4252.23
Sheathing, 3" x 10", Sq. Edge	23.688	M.B.M.	94.60	2240.88
Roofing - Slate and Paper	516.8	Sq.	24.00	12403.20
Window, D.H., 3'3" x 6'3"	1	No.	28.60	28.60
Door, Single, Wood Panel, Vert. Sliding - 8'3" x 10'8"	8	No.	72.30	578.40
Doors, Double, Wood, Batten, Semi-Circ. Head - Sealed, 9'0" x 11'6"	3	Pr.	95.80	287.40
Door, Single, Wood Panel, Vert. Sliding, Semi-Circ. Head - with Pilot Door - 2'0" x 5'0" - 8'2" x 11'7"	1	No.	93.00	93.00
Door, Single, Wood, Batten, Semi-Circ.Head - Vert. Sliding - Pilot Door Glazed 3'2"x7'0" - 10'0x12'0"	1	No.	108.00	108.00

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

COAL SHED - "B"

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Door, Single, Wood, Batten, Sealed Semi-Circ. Head, 10'0" x 12'0"	1	No.	105.00	105.00
Skylight, Flat - 3'9" x 3'3"	30	No.	15.80	316.00
Ridge Roll, G.I.	1400	Lin.Ft.	.60	840.00
Leaders, G.I., 4" Dia.	110	Lin.Ft.	.50	55.00
Gutter, Cast Iron, 2'6" Wide	822	Lin.Ft.	3.52	2893.44
Gutter, Cast Iron,	772	Lin.Ft.	2.14	1652.08
Hardware				106.40
Painting, 3 Coats, Lead and Oil	2770	Sq.Ft.	.0422	116.89
Bolts	569	Lb.	.15	85.35
Turnbuckles, 1-1/4"	60	No.	3.50	210.00
Scaffold				1300.00
Plumbing				867.99
Gas Piping				251.85
Electric				411.95
				171748.84
Field Overhead 7%				12022.42
				183771.26
Building Contractor's Profit 10%				18377.13
TOTAL COST		-		$202148.39

3498

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

STORAGE SHED "G"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Lumber, 10" Y.P.	.08	M.B.M.	99.60	7.97
" 9" "	.95	M.B.M.	99.60	94.62
" 5" "	.04	M.B.M.	95.30	3.81
" 6" "	.964	M.B.M.	95.30	91.87
" 4" "	.605	M.B.M.	95.30	57.66
Sheathing, 1" x 9" T. & G.	.605	M.B.M.	73.05	44.20
" 1" x 6" "	.567	M.B.M.	71.60	40.60
Windows, Fixed Sash, 4'9" x 5'2"	2	No.	.20	40.00
Door, Single, Wood Batten, 3'6" x 7'0"	1	No.	24.00	24.00
" Single, Wood Batten, 3'0" x 6'9"	1	No.	22.00	22.00
Corr. G.I.	1412	Sq.ft.	.20	282.40
Hardware				2.15
Painting, 3 Coats, L & O	1807	Sq.ft.	.0422	76.38
				787.54
FIELD OVERHEAD - 7%				55.13
				842.67
BUILDING CONTRACTOR'S PROFIT - 10%				84.27
TOTAL COST -				926.94

3499

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

SHED #1

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Lumber, 4" & Under, N.C.P.	.196	M.B.M.	79.60	15.60
Floor, Belgian block,	7	Sq.Yd.	4.21	29.47
Window, Fixed Sash, 2'8" x 4'6"	1	No.	12.10	12.10
Door, Single Wood Batten, 2'1" x 6'6"	1	No.	13.00	12.00
Corr. G.I.	276	Sq.ft.	.20	55.20
Hardware				1.15
Painting, 3 Coats, L & O	276	Sq.ft.	.0239	6.32
Painting, 3 Coats, L & O	100	Sq.ft.	.0422	4.22
				136.06
FIELD OVERHEAD - 7%				9.52
				145.58
BUILDING CONTRACTOR'S PROFIT - 10%				14.56
TOTAL COST - -				160.14

3500

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

PIPE RACK

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Lumber, 4" N.C.P.	.075	M.B.M.	79.60	5.9
" 4" "	.057	M.B.M.	79.60	4.5
Corr. G.I.	77	Sq.ft.	.20	15.4
Pipe. 1½"	48	Lin.ft.	.23	10.5
				36.4
FIELD OVERHEAD - 7%				2.5
				39.0
BUILDING CONTRACTOR'S PROFIT - 10%				3.9
TOTAL COST -				42.9

3501

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

WASH HOUSE

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
vation	51	Cu.Yd.	1.00	51.00
fill	16	Cu.Yd.	.60	9.60
l	35	Cu.Yd.	1.10	38.50
er Fill	25	Cu.Yd.	1.20	30.00
rete Footings, 1-3-5	6	Cu.Yd.	10.69	64.14
" Walls, "	3	Cu.Yd.	10.69	32.07
" Floor, "	20	Cu.Yd.	10.69	213.80
nt Finish, 1"	1304	Sq.ft.	.105	136.92
ing Forms	246	Sq.ft.	.106	26.08
l Forms	102	Sq.ft.	.263	26.83
nt Base, 12"	63	Lin.ft.	.446	28.22
" " 6"	240	Lin.ft.	.33	79.20
" Sills	2	Cu.ft.	3.00	6.00
l. Blocks, 4"	1557	Sq.ft.	.285	443.75
" " 3"	21	Sq.ft.	.265	5.57
ding Paper	1394	Sq.ft.	.01	13.94
ter on Blocks & Brickwork	470	Sq.Yd.	1.30	611.00
ter on Metal Lath	145	Sq.Yd.	2.24	324.80
er, 10" Y.P.	2.23	M.B.M.	99.60	222.11
" 8" "	.68	M.B.M.	95.30	64.80
" 6" "	.78	M.B.M.	95.30	74.33
s, 2" x 2"	75	Lin.ft.	.07	5.25
ors, 7/8" T. & G.	3.486	M.B.M.	71.60	249.60
ding, Quarter Round, 1"	340	Lin.ft.	.03	10.20
ilators, 20" Dia., G.I.	2	No.	40.00	80.00
ilators, 14" G.I. (Dia.)	2	No.	30.00	60.00
ows, D. H., 4'3" x 6'5"	1	No.	31.00	31.00
ows, Mull, 3'4" x 6'5"	1	Pr.	45.00	45.00
r, Panel, 2'0" x 6'6"	1	No.	19.00	19.00
r, Glazed, 3'0" x 7'0"	4	No.	31.70	126.80
r, Glazed, 2'6" x 7'0"	2	No.	30.00	60.00
ed Opening, 5'0" x 7'0"	1	No.	9.50	9.50
ctural Steel	1088	No.	.0623	67.78
l. Saddles	88	Lb.	.25	22.00
ware				17.45
ting, Lead & Oil, 3 Coats.	4491	Sq.ft.	.0422	189.52
e Partition, etc. 7/8"	298	Sq.ft.	2.00	596.00
" 1-1/4"	14	Sq.ft.	2.25	31.50
" 1-1/2"	158	Sq.ft.	2.40	379.20
Cap 3" x 2"	93.5	Lin.ft.	1.80	168.30

3502

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

WASH HOUSE

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Scaffold				20.00
Plumbing				1621.00
Heating				254.00
Gas Piping				84.59
				6661.15
FIELD OVERHEAD - 7%				466.28
				7127.43
BUILDING CONTRACTOR'S PROFIT - 10%				712.74
TOTAL COST -				7840.17

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

HOIST ENGINE HOUSE

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
...ber, 6" N.C.P.	.2	M.B.M.	79.60	15.92
" 4" "	.399	M.B.M.	79.60	31.76
...ring, 2" x 9" Plank, Y.P.	.228	M.B.M.	94.60	21.57
...fing & Siding, Corr. G.I.	713	Sq.ft.	.18	128.34
...ows, Fixed, 3'0" x 5'6"	1	No.	15.10	15.10
" " 4'0" x 7'0"	1	No.	20.40	20.40
...rs, Sl. 3'3" x 7'6"	1	No.	27.50	27.50
" Paneled, 2'7" x 6'9"	1	No.	25.25	25.25
...WORK				2.20
...inting, Lead & Oil, 2 Coats	1426	Sq.ft.	.0229	32.66
" " 3 "	172	Sq.ft.	.0422	7.26
...m Piping				42.60
				370.56
FIELD OVERHEAD - 7%				25.94
				396.50
BUILDING CONTRACTOR'S PROFIT - 10%				39.65
TOTAL COST		-		436.15

3504

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

WATCHMAN'S HOUSE #3

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Lumber, 6" N.C.P.	.066	M.B.M.	79.60	5.2
" 4" "	.143	M.B.M.	79.60	11.3
Roofers, 1" x 10" T. & G.	.091	M.B.M.	73.06	6.6
Flooring, 1" x 4½" "	.32	M.B.M.	116.00	37.1
Facia, 7/8" x 4"	8	Lin.ft.	.07	.5
" 1" x 10"	16	Lin.ft.	.16	2.5
Moulding, 1½" x 4"	16	Lin.ft.	.11	1.7
Ventilator, G.I., 9"Dia.	1	No.	3.00	3.0
Tar Paper	76	Sq.ft.	.018	1.3
Door, Paneled, 2'4" x 6'6"	1	No.	22.00	22.0
Windows, Fixed, 2'4" x 2'6"	2	No.	9.50	19.0
Hardware				1.2
Painting, Lead & Oil, 3 Coats	500	Sq.ft.	.0422	21.1
Gas Piping				13.0
				148.0
FIELD OVERHEAD - 7%				10.4
				158.1
BUILDING CONTRACTOR'S PROFIT - 10%			-	15.8
TOTAL COST -				173.9

3505

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

#4 DRIP OIL SHED

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
...vation	.125	Cu.Yd.	1.00	.13
...l	.125	Cu.Yd.	1.10	.14
...rete Floor, 1-3-5	.125	Cu.Yd.	10.69	1.34
...nt Finish	5	Sq.ft.	.105	.53
...er, 8" N.C.P.	.035	M.B.M.	79.60	2.79
" 4" "	.213	M.B.M.	79.60	16.95
...ows, Sliding, 3'0" x 3'0"	2	No.	13.60	27.20
...r, Paneled, 2'3" x 6'7"	1	No.	12.50	12.50
...ing & Siding, Corr. G.I.	298	Sq.ft.	.20	59.60
...nting, Lead & Oil, 2 Coats	298	Sq.ft.	.0229	6.82
...nting, Lead & Oil, 3 Coats	68	Sq.ft.	.0422	2.87
...nting, Cold Water,	298	Sq.ft.	.02	5.96
...ware				2.10
...Piping				13.33
				152.96
FIELD OVERHEAD - 7%				10.66
				162.92
BUILDING CONTRACTOR'S PROFIT - 10%				16.29
			TOTAL COST -	179.21

3506

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14th STREET WORKS

BRIQUETTE SHED

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation	3	Cu.Yd.	1.00	3.00
Haul	3	Cu.Yd.	1.10	3.30
Concrete Floor, 1-3-5	3	Cu.Yd.	10.69	33.07
Cement Finish, 1"	123	Sq.ft.	.105	12.92
Lumber, 6" N.C.P.	.077	M.B.M	79.60	6.13
" 4" "	.278	M.B.M.	79.60	22.13
Windows, Sliding, 2'10" x 2'10"	4	No.	7.70	30.80
Door, Covered with Sheet Iron, 2'11" x 6'8"	1	No.	33.50	33.50
Wood Ladder, 1'8" Wide, 10'0" Long	1	No.	8.50	8.50
Roof & Siding, Corr. G.I.	557	Sq.ft.	.20	111.40
Hardware				1.10
Painting, Lead & Oil, 2 Coats	1114	Sq.ft.	.0229	25.51
Painting, Lead & Oil, 3 Coats	102	Sq.ft.	.0422	4.30
Gas Lighting				14.55
				308.21
FIELD OVERHEAD - 7%				21.57
				329.78
BUILDING CONTRACTOR'S PROFIT - 10%				32.98
TOTAL COST -				362.76

3507

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

TOOL HOUSE

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Lumber, 6" N.C.P.	.144	M.B.M.	79.60	11.46
" 4" "	.085	M.B.M.	79.60	6.77
" 3" Plank, Y.P.	.33	M.B.M.	90.30	29.80
" 1" T. & G.	.145	M.B.M.	71.60	10.38
Door, Batten, 2'6" x 6'3"	1	No.	18.00	18.00
Window, Fixed, 2'8" x 2'10"	1	No.	11.20	11.20
Hardware				1.85
Roofing, Tar Paper	124	Sq.ft.	.015	1.86
Painting, Lead & Oil, 3 Coats	135	Sq.ft.	.0422	5.70
				97.02
FIELD OVERHEAD - 7%				6.79
				103.81
BUILDING CONTRACTOR'S PROFIT - 10%				10.38
TOTAL COST -				114.19

3508

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

FENCES AND WALLS

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Post Holes	341	No.	.75	255.75
Excavation, Dry	1637	Cu.Yd.	1.00	1637.00
Excavation, Wet	42	Cu.Yd.	2.50	105.00
Backfill	892	Cu.Yd.	.60	535.20
Haul	787	Cu.Yd.	1.10	865.70
Piles	246	No.	12.58	3094.68
Pile Capping - Lumber - 12"	10.536	M.B.M.	111.00	1169.50
Pile Capping - Lumber - 10"	.314	M.B.M.	109.00	34.23
Concrete Footings, 1-3-5	96	Cu.Yd.	10.69	102.62
Footing Forms	1932	Sq.Ft.	.106	204.79
Sheet Piling, 9'0" Deep	130	Lin.Ft.	5.30	689.00
Sheet Piling, 8'0" Deep	222	Lin.Ft.	4.68	1038.96
Sheet Piling, 7'0" Deep	53	Lin.Ft.	4.68	248.04
Brickwork, Common	572.103	M.	49.55	28347.70
Bluestone - Caps and Coping	557	Cu.Ft.	5.50	3063.50
Bluestone - Water table	110	Cu.Ft.	5.80	638.00
Bluestone - Posts	83	Cu.Ft.	5.80	481.40
Brownstone - Caps	35	Cu.Ft.	5.50	192.50
Granite Posts	23	Cu.Ft.	8.50	195.50
				2290.31
Wrought Iron Picket Fences				
Rods and Bolts	834	Lb.	.15	125.10
Barbed Wire	1216	Lin.Ft.	.015	18.24
Turnbuckle Rods, 1" Dia.,12'0" Long	13	No.	2.75	35.75
Steel Wheel Guard	786	Lb.	.10	78.60
Wheel Guards, 8" Pipe, 2' long, with concrete	2	No.	2.50	5.00
Lumber, 12" - Y.P.	6.782	M.B.M.	101.60	689.05
Lumber, 10" - Y.P.	3.691	M.B.M.	99.60	367.62
Lumber, 8" - Y.P.	1.044	M.B.M.	95.30	99.49
Lumber, 6" - Y.P.	6.689	M.B.M.	95.30	637.46
Lumber, 4" - Y.P.	.488	M.B.M.	95.30	46.51
Siding, 7/8" T&G	13.708	M.B.M.	71.60	981.49
Facia, 1" x 6"	1685	Lin.Ft.	.06	101.10
Facia, 1" x 5"	192	Lin.Ft.	.055	10.56
Facia, 1" x 4"	996	Lin.Ft.	.04	39.84
Base, 3/4" x 12"	208	Lin.Ft.	.115	23.92
Base, 3/4" x 9"	164	Lin.Ft.	.105	17.22
Base, 7/8" x 12"	406	Lin.Ft.	.115	46.69
Base, 1" x 10"	422	Lin.Ft.	.108	45.58
Watertable, 1" x 2-1/2"	1036	Lin.Ft.	.035	36.26

CONSOLIDATED GAS COMPANY

14TH STREET WORKS

FENCES AND WALLS

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Cap, 1" x 10"	406	Lin.Ft.	.108	43.85
Cap, 1" x 8"	590	Lin.Ft.	.10	59.00
Cove Moulding, 1"	952	Lin.Ft.	.04	38.08
Gates, Wood Pan. Sliding with Pilot, 9'6" x 11'6"	1	No.	108.00	108.00
Gates, Wood, Bat. Sliding with Pilot, 10'8" x 11'0"	1	Pr.	138.00	138.00
Gates, Wood, Bat. - with Pilot, 11'0" x 8'9"	1	Pr.	90.00	90.00
Gates, Wood, Bat. - 10'0" x 15'0"	1	No.	130.50	130.50
Gates, Wood, Bat. - with Pilot, 11'0" x 15'0"	1	No.	138.00	138.00
Gates, Batten, 10'0" x 10'0"	1	Pr.	90.00	90.00
Gates, Batten, 5'8" x 7'4"	1	Pr.	44.00	44.00
Gates, Batten, 3'0" x 6'9"	1	No.	28.00	28.00
Gates, Batten, 12'0" x 9'0"	1	Pr.	92.00	92.00
Hardware				140.40
Painting, Lead and Oil, 2 Coats	6751	Sq.Ft.	.0229	154.60
Painting, Lead and Oil, 3 Coats	25256	Sq.Ft.	.0422	1065.80
Scaffold				1000.00
				51955.09
Field Overhead 7%				3636.86
				55591.95
Building Contractor's Profit 10%				5559.20
				$61151.15

3510

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14th STREET WORKS

PAVEMENTS

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation	13	Cu.Yd.	1.00	13.00
Backfill	10	Cu.Yd.	.60	6.00
Haul	5	Cu.Yd.	1.10	3.30
Bluestone Curb,	93	Cu.ft.	2.55	237.15
Belgian Block Pavement	2370	Sq.Yd.	4.21	9977.70
Bluestone Flagging	2550	Sq.ft.	.36	918.00
Brick Pavement	107	Sq.Yd.	2.29	245.03
				11400.18
		FIELD OVERHEAD - 7%		798.01
				12198.19
		BUILDING CONTRACTOR'S PROFIT - 10%		1219.82
		TOTAL COST	-	13418.01

3511

CONSOLIDATED GAS COMPANY

14th STREET WORKS

MISCELLANEOUS PIT

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation	191	Cu.Yd.	1.00	191.00
Backfill	117	Cu.Yd.	.60	70.20
Haul	74	Cu.Yd.	1.10	81.40
Concrete on Ground, 1-3-5	7	Cu.Yd.	10.69	74.83
Brickwork, Com.	20.859	M.	49.55	1033.56
Concrete Coping, 3" x 10"	13	Lin.ft.	.41	5.33
Bluestone Slab, 4" Thick	6	Sq.ft.	.55	3.30
Lumber, 12" Y.P.	.022	M.B.M.	101.60	2.24
Pit Covers				212.43
				1674.39
FIELD OVERHEAD - 7%				117.20
				1791.49
BUILDING CONTRACTOR'S PROFIT - 10%				179.15
TOTAL COST -				1970.64

3512

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

14th STREET WORKS

OUTSIDE DRAINAGE

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Plumbing				1265.96
	FIELD OVERHEAD - 7%			88.62
				1354.61
	BUILDING CONTRACTOR'S PROFIT - 10%			135.46
	TOTAL COST	-		1490.07

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

GENERAL SUMMARY OF COSTS

upon

A SUB-CONTRACT BASIS

as of

JUNE 1, 1923

STRUCTURES			TOTAL COST	PAGES
—	-	Valve House	$7,866.49	1 - 2
"C"	-	Purifier House	76,239.34	3 - 4
—	-	Office & Meter House	41,190.23	5 - 8
"D"	-	Retort & Condenser	184,255.48	9
—	-	Retort House "E-2, E-3, E-4"	129,359.87	10-11
—	-	Engine & Exhauster House "E & E1"	31,685.08	12-13
"E"	-	Carpenter Shop	1,669.39	14
"L"	-	Boiler & Engine House	5,484.60	15-16
"O"	-	Purifier House	1,629.32	17
"P"	-	Pump House	645.61	18
"Q"	-	Coal Storage House	55,314.02	19
—	-	Coal Shed	62,715.03	20
—	-	Trestle	29,613.95	21
—	-	Vaults	58,423.90	22-23
"X"	-	Tank House	863.10	24
"D-1"	-	Scale House & Lockers	249.72	25
—	-	Pier	49,244.49	26
—	-	Tool House #1	179.11	27
—	-	Ramp Adjoining "E"	615.24	28
—	-	Hose House	28.37	29
—	-	Ramp Adj. Coal Shed #2	2,126.81	30
—	-	Pump House	291.09	31
—	-	Tar Well House	133.45	32
"H"	-	Coke Office	1,928.18	33
—	-	Dump	1,799.88	34
—	-	Shed in Coal Shed S	90.95	35
—	-	Tank House "T-1" North	401.40	36
—	-	Tank House "T-1" South	423.65	37
—	-	Leading Platform	142.18	38
—	-	Scale House	397.17	39
—	-	Valve Pits	111.01	40

3514

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

GENERAL SUMMARY OF COSTS

upon

A SUB-CONTRACT BASIS

as of

JUNE 1, 1923.

APPURTENANCES		TOTAL COST	PAGES
—— -	Fences	$32,554.18	41-42
—— -	Paving	17,751.64	43
—— -	Outside Gas Lighting	675.87	44
	GRAND TOTAL -	$796,099.78	

NOTE: - No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and taxes, or other undistributed costs during construction.

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

VALVE HOUSE

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Dry	177	Cu.Yd.	1.00	177.00
" Wet	228	Cu.Yd.	2.50	570.00
Backfill	104	Cu.Yd.	.60	62.40
Sand	301	Cu.Yd.	1.10	331.10
Cinder Fill	27	Cu.Yd.	1.20	32.40
Piles	54	No.	12.58	679.32
Pile Capping, Lumber, 8"	1.738	M.B.M.	103.00	179.01
Concrete Floor, 1-3-5	12	Cu.Yd.	10.69	128.28
Cement Finish, 1"	574	Sq.ft.	.105	60.27
Cement Coping, 4" Thick	41	Sq.ft.	.67	27.47
" " 1½" Thick	17	Sq.ft.	.30	5.10
Cement Stucco	16	Sq.ft.	.17	2.72
Cement Gutter, 3" x 4"	115	Lin.ft.	.198	22.77
Brickwork, Com.	42.886	M.	49.55	3125.00
Brick Floor Arches	3.696	M.	43.26	159.89
Brick Arch Centering	330	Sq.ft.	.265	86.79
Limestone Sills, etc.	23	Cu.ft.	5.80	133.40
" Coping	14	Cu.ft.	5.50	77.00
" Flagging	20	Sq.ft.	.36	7.20
Lumber, 8" Y.P.	2.616	M.B.M.	95.30	249.30
" 6" "	.334	M.B.M.	95.30	31.83
" 4" "	.197	M.B.M.	95.30	18.77
Furring, 1" x 2"	660	Lin.ft.	.05	33.00
Flooring, 7/8" x 3¼" T. & G.	.307	M.B.M.	152.15	46.71
Roofers, 7/8" x 8¼" T. & G.	.744	M.B.M.	73.03	54.33
Wainscot, 3/4" x 3" T. & G. B.	215	Sq.ft.	.15	32.25
" Cap. 4½" x 8-3/4"	46	Lin.ft.	.35	16.10
Base, 3-Member, 1-1/4" x 10"	46	Lin.ft.	.27	12.42
Soffit, 1" x 18"	80	Lin.ft.	.30	24.00
Facia, 1" x 8"	72	Lin.ft.	.10	7.20
Cornice, 1" x 4"	80	Lin.ft.	.08	6.40
Brackets, 3" x 6" x 18"	32	No.	.75	24.00
Roofing, Slate on Building Paper	6.2	Sq.	24.00	148.80
Flashing, G.I.	24	Sq.ft.	.35	8.40
Ridge Roll, G.I.	104	Lin.ft.	.60	62.40
Door, Glazed, 3'0" x 8'0"	1	No.	82.00	82.00
Windows, D. H. with Panel Back, 3'4" x 6'6"	3	No.	62.00	186.00
Hardware				3.75
Ornamental Iron				383.08

3516

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

VALVE HOUSE

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Painting, Lead & Oil, 3 Coats	1917	Sq.ft.	.0422	80.90
Painting, Cold Water	1066	Sq.ft.	.02	21.32
Varnishing	452	Sq.ft.	.054	24.41
Scaffold				100.00
Gas Piping				66.27
Heating				92.74
				6683.50
FIELD OVERHEAD - 7%				467.85
				7151.35
BUILDING CONTRACTOR'S PROFIT - 10%				715.14
TOTAL COST -				7866.49

3516A

3517 Follows

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

PURIFIER HOUSE - "C"

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Dry	4049	Cu.Yd.	1.25	5061.25
Excavation, Wet	1571	Cu.Yd.	2.50	3927.50
Backfill	1430	Cu.Yd.	.60	858.00
Sand	4190	Cu.Yd.	1.10	4609.00
Cinder Fill	210	Cu.Yd.	1.20	252.00
Wheat Piling, 13'0" Deep	564	Lin.Ft.	6.60	3722.40
Piles	462	No.	12.58	5811.96
Concrete Pile Capping, 1-3-5	79	Cu.Yd.	10.69	844.51
Concrete Pile Capping, Forms	1307	Sq.Ft.	.106	138.54
Concrete Floors, 1-3-5	199	Cu.Yd.	10.69	2127.31
Brickwork, Common	356.065	M.	49.56	17642.53
Brickwork, Arches	20.139	M.	43.26	871.21
Brick Floor	160	Sq.Yd.	2.29	366.40
Tar Paper, 3-ply	1440	Sq.Ft.	.02	28.80
Arch Centering	1116	Sq.Ft.	.263	293.51
Limestone - Coping	21	Cu.Ft.	5.50	115.50
Limestone - Sills and Lintels	20	Cu.Ft.	5.80	116.00
Limestone - Watertable	9	Cu.Ft.	5.80	52.20
Lumber, Trusses, 12" - Y.P.	14	M.B.M.	116.60	1632.40
Lumber, Trusses, 10" - Y.P.	8.293	M.B.M.	114.60	950.38
Lumber, Trusses, 8" - Y.P.	5.567	M.B.M.	110.30	614.04
Lumber, Trusses, 6" - Y.P.	.364	M.B.M.	110.30	40.15
Lumber, Trusses, 4" - Y.P.	3.579	M.B.M.	110.30	394.76
Lumber, 14" - Y.P.	3.794	M.B.M.	108.60	412.03
Lumber, 12" - Y.P.	4.47	M.B.M.	101.60	454.15
Lumber, 10" - Y.P.	8.4	M.B.M.	99.60	836.64
Lumber, 8" - Y.P.	4.965	M.B.M.	95.30	463.63
Lumber, 6" - Y.P.	10.7	M.B.M.	95.30	1019.71
Lumber, 4" - Y.P.	3.463	M.B.M.	95.30	329.93
Sheathing, 1-1/8" T&G	.821	M.B.M.	76.60	62.89
Sheathing, 1" T&G	16.67	M.B.M.	71.60	1193.57
Sheathing, 1-1/2" T&G	.439	M.B.M.	76.60	33.63
Yellow Flooring, 3" x 3"	2412	Sq.Ft.	.21	506.52
Cupboard, 10'	8.565	M.B.M.	110.00	942.15
Roofing, Tar and Gravel	13548	Sq.Ft.	.13	1761.24
Flashing, Tin	169	Sq.Ft.	.35	59.15
Skylight, Flat, 3'6" x 5'2'	8	No.	11.00	88.00
Ventilator, Wood Louvre Sides, 6'8" x 6'8" x 6'6"	3	No.	95.00	285.00
Studs, 2" x 10"	44	Lin.Ft.	.24	10.56
Wood Cornice, 3" x 4"	30	Lin.Ft.	.22	6.60

3517

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42ND STREET WORKS

PURIFIER HOUSE - "C"

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Cornice, 2'9" High - with Brackets	105	Lin.Ft.	1.21	127.05
Cornice, 2'4" High - with Brackets	156	Lin.Ft.	.95	148.20
Windows, D.H., 3'8" x 8'0"	21	No.	32.00	672.00
Windows, D.H., 3'6" x 6'0"	7	No.	29.00	203.00
Windows, Frames only, 3'6"x8'0"	2	No.	10.50	21.00
Windows, Casement, 4'0" x 4'0"	2	No.	17.80	35.60
Windows, Casement, 3'8"x7'0", Seg.Head	1	No.	47.00	47.00
Doors, Batten, 3'0" x 8'0"	1	No.	24.60	24.60
Door, 3'10" x 8'0"	1	No.	28.80	28.80
Doors, Batten, 4'0"x7'0", with 4' Trans.	1	No.	39.00	39.00
Doors, Batten, 6'0" x 7'10"	1	Pr.	39.20	39.20
Doors, Batten, 2'5" x 6'4"	1	No.	21.30	21.30
Doors, Batten, 6'0" x 8'0", Incl.Trans.	3	Pr.	52.90	158.70
Doors,Bat. 4'7"x7'9", Incl. Trans.	1	Pr.	43.30	43.30
Doors,Bat. 6'0"x7'6", Incl. Trans.	3	Pr.	48.00	144.00
Doors,Bat. 4'5"x8'0", Incl. Trans.	1	Pr.	46.70	46.70
Doors,Bat. 4'4"x9'6"	1	No.	35.00	35.00
Doors,Bat. 4'0"x10'0"	1	No.	66.00	66.00
Doors,Bat. 3'3"x7'3", Trap Door	1	No.	10.70	10.70
Doors,Bat. 6'2"x5'3", " "	1	No.	20.40	20.40
Doors,Bat. 3'3"x8'4", " "	1	No.	14.80	14.80
Doors,Bat. 6'3"x6'4", " "	2	No.	22.00	44.00
Doors,Bat. 3'8"x4'0", " "	1	No.	8.60	8.60
Doors,Bat. 2'6"x6'4", " "	1	No.	9.40	9.40
Doors,Bat. 7'10"x7'10" " "	1	No.	43.40	43.40
Doors,Bat. 5'9"x7'3", " "	1	No.	31.50	31.50
Stairs, 3'0" Wide, 24 Treads	1	No.	87.00	87.00
Hardware				19.30
Structural Steel	21699	Lb.	.0623	1351.80
Miscellaneous Iron				350.00
Painting, Lead and Oil, 3 Coats	12517	Sq.Ft.	.0422	528.20
Painting, Cold Water	17374	Sq.Ft.	.02	347.48
Scaffold				750.00
Plumbing				330.00
				64774.23
Field Overhead 7%				4534.20
				69308.43
Building Contractor's Profit 10%				6930.86
TOTAL COST -				$76239.30

3518

CONSOLIDATED GAS COMPANY

42ND STREET WORKS

OFFICE AND METER HOUSE

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Steam Shovel	1441	Cu.Yd.	.41	590.81
Excavation, Wet	119	Cu.Yd.	1.50	178.50
Backfill	263	Cu.Yd.	.60	157.80
Haul	1297	Cu.Yd.	1.10	1426.70
Rubble Stone	661	Cu.Ft.	.61	403.21
Piles	78	No.	12.58	981.24
Pile Capping, Lumber, 10"	2.648	M.B.M.	109.00	288.63
Concrete Trenches, 1-2-4	7	Cu.Yd.	11.47	80.29
Trench Forms	380	Sq.Ft.	.263	94.68
Concrete Floor, 1-3-5	56	Cu.Yd.	10.69	598.64
Cement Finish, 1"	2615	Sq.Ft.	.105	274.58
Brickwork, Common	239.925	M.	49.55	11888.28
Partil Courses	380	Lin.Ft.	.25	95.00
Brick Floor Arches	13.713	M.	43.26	593.22
Beam Centers	53	Sq.Ft.	.263	13.94
Floor Arch Centering	653	Sq.Ft.	.263	171.74
Limestone - Sills, Etc.	97	Cu.Ft.	5.80	562.60
Limestone - Steps	17	Cu.Ft.	5.75	97.75
Limestone - Coping	30	Cu.Ft.	5.50	165.00
Limestone - Moulding	2	Cu.Ft.	5.80	11.60
Brownstone - Coping	59	Cu.Ft.	5.80	342.20
Ridge Roll, Cement Tile	39	Sq.Ft.	1.00	39.00
Lumber, 14" - Y.P.	4.207	M.B.M.	108.60	456.88
Lumber, 12" - Y.P.	10.61	M.B.M.	101.60	1077.98
Lumber, 10" - Y.P.	2.034	M.B.M.	99.60	201.59
Lumber, 8" - Y.P.	.379	M.B.M.	95.30	36.12
Lumber, 6" - Y.P.	2.784	M.B.M.	95.30	265.32
Lumber, 4" - Y.P.	.96	M.B.M.	95.30	91.49
Furring, 1" x 2"	2680	Lin.Ft.	.05	134.00
Bridging, 2" x 3"	334	Lin.Ft.	.065	21.71
Truss Lumber, 14"	.7	M.B.M.	123.60	86.52
Truss Lumber, 12"	.94	M.B.M.	116.60	109.60
Truss Lumber, 10"	.166	M.B.M.	114.60	19.02
Truss Lumber, 8"	.277	M.B.M.	110.30	30.55
Rough Flooring, 1" x 9" T&G	2.278	M.B.M.	73.05	166.41
Finish Flooring, 1" x 3" T&G	2.612	M.B.M.	142.15	371.30
Finish Flooring, 1" x 41/2" T&G	2.628	M.B.M.	116.60	306.42
Finish Flooring, 1" x 9-1/2"	2.624	M.B.M.	73.05	191.68
Finish Flooring, 1" x 10" - Sq. Edge	.026	M.B.M.	81.60	2.12
Floor Slate, 1" x 2"	35	Sq.Ft.	.17	5.95

3519

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42ND STREET WORKS

OFFICE AND METER HOUSE

COST AS OF JUNE 1ST, 1923.

	QUINTITY	UNIT	UNIT PRICE	TOTAL COST
Ceiling, 1" x 4-1/2" T&G B.	3.736	M.B.M.	89.60	334.75
Partition - 1" x 9-1/2" B&CB	684	Sq.Ft.	.086	58.82
Partition - 1" x 18" Sq. Edge	90	Sq.Ft.	.10	9.00
Partition - 1" x 4-1/2" T&G B.	1522	Sq.Ft.	.09	136.98
Sheathing, 1" x 4-1/2" T&G B.	.278	M.B.M.	81.60	22.68
Ceiling, 1" x 10" - Sq. Edge	1.53	M.B.M.	81.60	124.85
Roofers, 1" x 9-1/2" T&G	3.062	M.B.M.	73.05	223.68
Pipe Casing, 1" x 9" - D4S	.032	M.B.M.	89.60	2.87
Glazed Office Part. 4'0"	4	Lin.Ft.	3.75	15.00
Glazed Office Part. 11'3" high	18	Lin.Ft.	5.00	90.00
Wainscot, 1" x 4-1/2" T&G B. - Pine	194	Sq.Ft.	.09	17.46
Wainscot, 3/4" x 3" T&G B.	754	Sq.Ft.	.146	110.08
Wainscot, 3/4" x 3" T&G B&CB	49	Sq.Ft.	.146	7.15
Wainscot, 3/4" x 4-1/2" T&G B.	54	Sq.Ft.	.09	4.86
Wainscot, 7/8" x 9" T&G B&CB	66	Sq.Ft.	.081	5.35
Wainscot Cap - 3 member	91	Lin.Ft.	.16	14.56
Wainscot Cap - 3 member - Hardwood	15	Lin.Ft.	.19	2.85
Wainscot, Cap - 10 member - "	12	Lin.Ft.	.55	6.60
Wainscot Cap - 4 member - "	19	Lin.Ft.	.32	6.08
Wainscot Cap - 2 member -	40	Lin.Ft.	.14	5.60
Base, 2 member - 1" x 8"	103	Lin.Ft.	.22	22.66
Base, 3 member - 1" x 10"	92	Lin.Ft.	.30	27.60
Base, 2 member - 1" x 10"	325	Lin.Ft.	.24	78.00
Base, 1" x 6"	9	Lin.Ft.	.16	1.44
Base, 3 member - 1-1/4" x 8"	61	Lin.Ft.	.30	18.30
Chair Rail, 1-1/2" x 3"	194	Lin.Ft.	.12	23.28
Cornice, 2 member	140	Lin.Ft.	.46	64.40
Cornice, 2 member	110	Lin.Ft.	.22	24.20
Crown Moulding, 6'	150	Lin.Ft.	.24	36.00
Cornice, 2 member	80	Lin.Ft.	.28	22.40
Cornice, 2 member	37	Lin.Ft.	.28	10.36
Cornice, 3 member	140	Lin.Ft.	.33	46.20
Cornice, 1 member	22	Lin.Ft.	.14	3.08
Picture Moulding, 1" x 1-1/2"	92	Lin.Ft.	.05	4.60
Column Casings	2	No.	62.00	124.00
Slat Floor, 1" x 2" - Cupola	27	Sq.Ft.	.17	4.59
Siding and Sheathing, 1"x9½" T&G, Cupola	.214	M.B.M.	73.05	15.63
Siding, 1" x 8" - "	.085	M.B.M.	72.30	6.15
Wainscot, 1" x 4-1/2" T&G B. - Cupola	.045	M.B.M.	89.60	4.03
Ceiling, 1" x 3-1/2" T&G B. - "	.044	M.B.M.	89.60	3.94
Wainscot Cap - 2 member - "	24	Lin.Ft.	.26	6.24

3520

CONSOLIDATED GAS COMPANY

42ND STREET WORKS

OFFICE AND METER HOUSE

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Pole, 8" Dia., 12'0" Long - Cupola	1	No.	2.25	2.25
Watertable, 2 member - "	32	Lin.Ft.	.37	11.84
Cornice, 2 member - "	32	Lin.Ft.	.20	6.40
Facia, 1" x 8" - "	32	Lin.Ft.	.14	4.48
Facia, 1" x 2-1/2" - "	32	Lin.Ft.	.06	1.92
Facia, 1" x 2" - "	32	Lin.Ft.	.05	1.60
Windows, D.H., 2'2"x5'6" - "	8	No.	17.25	138.00
Corner Moulding, 1-1/2" x 1-1/2"	45	Lin.Ft.	.045	2.03
Half Round Moulding, 1"	24	Lin.Ft.	.03	.72
Beam Casings, 8" x 12"	60	Lin.Ft.	.55	33.00
Moulded Battens, 3 members	785	Lin.Ft.	.43	337.55
Cap Moulding, 3 members	20	Lin.Ft.	.08	1.60
Door Saddle, 1-1/2" x 4"	44	Lin.Ft.	.13	5.72
Moulding, 2-1/2" x 3"	24	Lin.Ft.	.15	3.60
Doors, Gl. with Trans. 5'2"x8'0"	2	Pr.	85.00	170.00
Doors, Gl. Seg. Head, 2'7"x6'6"	1	No.	43.00	43.00
Doors, Gl., 3'6"x7'3" with Trans.	1	No.	70.00	70.00
Doors, Pan. 3'6"x8'0" " "	3	No.	70.00	210.00
Doors, Gl., with box frame, 3'0"x6'8"	1	No.	42.50	42.50
Doors, Gl., 2'3" x 6'4"	1	No.	30.00	30.00
Doors, Gl., 3'0" x 7'8"	2	No.	45.00	90.00
Doors, Gl., with trans., 3'1" x7'8"	1	No.	59.50	59.50
Doors, Gl., with trans., 2'6" x7'8"	1	No.	57.00	57.00
Doors, Bat. with mesh wicker door, 5'0"x8'0"	1	No.	75.00	75.00
Doors, Pan., with trans., 3'0"x7'4"	3	No.	45.00	135.00
Doors, Gl., 4'8" x 6'10"	1	Pr.	42.00	42.00
Doors, Gl., 2'8" x 6'8"	2	No.	32.00	64.00
Doors, Gl., 2'8" x 7'4"	2	No.	35.00	70.00
Doors, Pan. 2'9" x 7'3"	1	No.	35.00	35.00
Doors, Pan. 2'4" x 7'6"	1	No.	35.00	35.00
Doors, Gl., 2'6" x 6'6"	1	No.	32.00	32.00
Doors, Bat. 2'3" x 5'8"	2	No.	14.50	29.00
Doors, Bat. 2'0" x 5'0"	1	No.	8.00	8.00
Steel Windows, Circ.Head, 3'6"x 6'0"	4	No.	21.00	84.00
Windows, Casement, 3'2" x 4'2"	1	Pr.	18.00	18.00
Windows, Casement, 1'5" x 1'9"	1	No.	6.00	6.00
Windows, D.H., 3'6" x 7'2"	4	No.	35.10	140.40
Windows, D.H., 3'6" x 5'8"	9	No.	30.50	274.50
Windows, D.H., 1'6" x 4'6"	1	No.	21.00	21.00
Windows, Casement, 1'4" x 1'4"	2	No.	13.00	26.00

3521

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42ND STREET WORKS

OFFICE AND METER HOUSE

COST AS OF JUNE 1ST., 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Windows, D.H., 3'6" x 6'7"	2	No.	32.00	64.00
Windows, Sliding, 5'2" x 6'3"	2	No.	31.20	62.40
Trimmed Opening, 12'0" x 10'8"	1	No.	25.75	25.75
Hardware				55.35
Roofing, Slate on Building Paper	25.5	Sq.	24.00	612.00
Roofing, Tin	20	Sq.Ft.	.35	7.00
Roofing, Sheet Copper	130	Sq.Ft.	.50	65.00
Flashing, Copper	40	Sq.Ft.	.50	20.00
Roof Ornament, 6" x 20" Copper	1	No.	10.00	10.00
Roof Ornament, 1'0" x 1'6" G.I.	1	No.	6.00	6.00
Flashing, G.I.	115	Sq.Ft.	.25	28.75
Flashing, Cement, 6"	66	Lin.Ft.	.20	13.20
Leader, G.I., 4"	40	Lin.Ft.	.50	20.00
Skylight, Flat, Wood, 4'0" x 4'0"	1	No.	14.00	14.00
Stairs, 2'2" Wide, 4 Tr. & Platform	1	No.	20.00	20.00
Stairs, 1'9" Wide, 8 Tr.	1	No.	18.10	18.10
Stairs, 3'0" Wide, 20 Tr.	1	No.	80.00	80.00
Stairs, 2'0" Wide, 14 Tr.	1	No.	26.00	26.00
Structural Steel	6621	Lb.	.0623	412.49
Miscellaneous Iron				1728.24
Plaster on Wood Lath	683	Sq.Yd.	1.80	1229.40
Plaster on Brick	135	Sq.Yd.	1.30	175.50
Painting, Lead and Oil, 3 Coats	23008	Sq.Ft.	.0422	970.94
Stain and Shellac	1461	Sq.Ft.	.054	78.89
Varnishing	1177	Sq.Ft.	.054	63.56
Painting, Cold Water	10708	Sq.Ft.	.02	214.16
Scaffold				450.00
Plumbing				527.96
Heating				666.85
Electric				27.78
Gas Piping				510.60
				34995.94
Field Overhead 7%				2449.72
				37445.66
Building Contractor's Profit 10%				3744.57
TOTAL COST -				$41190.23

CONSOLIDATED GAS COMPANY

42ND STREET WORKS

RETORT AND CONDENSER - "D"

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Steam Shovel	6589	Cu.Yd.	.41	2701.49
Excavation, Wet	290	Cu.Yd.	1.50	435.00
Excavation, Dry	1689	Cu.Yd.	1.00	1689.00
Backfill	1299	Cu.Yd.	.60	779.40
Haul	6879	Cu.Yd.	1.10	7566.90
Piles	615	No.	12.58	7736.70
Pile Capping, 12" x 12"	13.7	M.B.M.	111.00	1520.70
Concrete Footings, 1-3-5	19-1/3	Cu.Yd.	10.69	206.67
Concrete Slabs, 1-2-4	6	Cu.Yd.	11.47	68.82
Reinforcing Mesh	336	Sq.Ft.	.065	21.84
Slab Forms	336	Sq.Ft.	.248	83.33
Cobble Stone Floor	1084	Sq.Ft.	1.26	1365.84
Brickwork, Common	1430.58	M.	49.55	70885.24
Mason Centers	59	Sq.Ft.	.263	15.52
Bluestone, Sills, etc.	664	Cu.Ft.	5.80	3851.20
Roofing, Slate	191.23	Sq.	23.00	4398.29
Cement Flashing	97	Sq.Ft.	.20	19.40
Corr. Galv. Iron	598	Sq.Ft.	.22	131.56
Steel Windows, 3'0" x 9'9"	10	No.	23.40	234.00
Steel Windows, 5'0" x 12'0"	4	No.	48.00	192.00
Structural Steel	275075	Lb.	.0623	17137.17
Steel Floor Plates	192770	Lb.	.12	23132.40
Ornamental Iron				1991.80
Lintel, C.I.	2345	Lb.	.06	140.70
Doors, Gl., 5'0"x9'8", with Tran.	1	No.	59.00	59.00
Windows, Casement, with Trans., 5'0" x 11'9"	4	No.	49.30	197.20
Window Louvres, Steel, 5'0"x12'0"	30	No.	179.00	5370.00
Canopies, Wood	13	No.	10.60	137.80
Entrance Door and Steps	1	No.	372.89	372.89
Doors, Steel, 5'1" x 6'1"	6	Pr.	120.00	720.00
Lumber, 6" - Y.P.	.663	M.B.M.	95.30	63.18
Hardware				2.60
Painting, Lead and Oil, 2 Coats	21071	Sq.Ft.	.0229	482.53
Scaffold				1300.00
Plumbing				869.35
Gas Piping				667.89
				156546.71
Field Overhead 7%				10958.27
				167504.98
Building Contractor's Profit 10%				16750.50
TOTAL COST		-		$184255.48

3523

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

RETORT HOUSE , "E-2, E-3, E-4"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Steam Shovel	5516	Cu.Yd.	.41	3261.56
Excavation, Dry	71	Cu.Yd.	1.00	71.00
Excavation, Wet,	438	Cu.Yd.	1.50	657.00
Backfill	611	Cu.Yd.	.60	366.60
Haul	5414	Cu.Yd.	1.10	5955.40
Cinder Fill	193	Cu.Yd.	1.20	231.60
Sheet Piling, 16'0" Deep	546	Lin.ft.	7.90	4313.40
Sheet Piling, 8'0" Deep	1031	Lin.ft.	4.68	4825.08
Piles	675	No.	12.58	8491.50
Pile Capping, 12" x 12"	17.856	M.B.M.	111.00	1982.22
Pile Capping, Concrete, 1-3-5	17	Cu.Yd.	10.69	181.73
Concrete Arches 1-2-4	9	Cu.Yd.	11.47	103.23
" Wall 1-3-5	4	Cu.Yd.	10.69	42.76
Reinforcing Mesh	333	Sq.ft.	.065	21.65
Pile Cap Forms,	256	Sq.ft.	.106	27.14
Arch Forms	333	Sq.ft.	.263	87.58
Wall Forms	348	Sq.ft.	.263	91.52
Brickwork, Com.	869.715	M.	49.55	43094.30
Dentil Courses	1225	Lin.ft.	.25	306.25
Brick Floor	82	Sq.Yd.	2.39	187.70
Granite Block Pavement	50	Sq.Yd.	5.21	260.50
Cobble Stone Pavement	900	Sq.Yd.	1.26	1134.00
Bluestone Watertable	51	Cu.ft.	5.80	295.80
" Bend Stones	218	Cu.ft.	4.25	926.50
" Steps	2.5	Cu.ft.	5.75	14.38
" Coping	151	Cu.ft.	5.50	830.50
" Curb.	67.5	Cu.ft.	2.55	172.12
" Flagging	812	Sq.ft.	.36	292.32
Waterproofing, 3 Ply	1428	Sq.ft.	.12	171.36
Lumber, 9" Y.P.	.081	M.B.M.	99.60	8.07
" 6" "	.028	M.B.M.	95.30	2.67
" 4" "	.086	M.B.M.	95.30	8.20
" 1" x 10" Sq. Edge	.813	M.B.M.	81.60	66.35
" 1½" x 9" Sq. Edge, Y.P.	.035	M.B.M.	96.60	3.38
Roofing Slate	157.5	Sq.	23.00	3622.50
Cement Flashing, 3" x 3"	346	Lin.ft.	.20	69.20
Galv. Iron Flashing	55	Sq.ft.	.35	19.25
Louvres, W. P. Slats, 6'0" Dia.	2	No.	30.60	61.20
" " " 5'0" X 9'10"	5	No.	32.40	162.00
Doors, Batten, 2'7" x 5'6"	1	No.	7.20	7.20
Mason Centers	1401	Sq.ft.	.263	368.46

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

RETORT HOUSE "E-3, E-3, E-4"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Wood Stairs, 2'1" Wide, 5 Tr.	2	No.	11.50	23.00
" " 2'4" " 5 Tr.	1	No.	12.00	12.00
Structural Steel	175240	Lb.	.0623	10917.45
Ornamental Iron				1252.59
Steel Floor Plates	90193	Lb.	.12	10823.16
Steel Doors & Frames, 5'0" x 10'0"	8	No.	175.00	1400.00
Steel Windows 5'0" x 10'6"	16	No.	42.00	630.00
Louvres, Steel, 2'0" Round,	4	No.	12.56	50.24
" " 3'0" "	8	No.	28.28	226.24
" " 6'0" "	4	No.	113.08	452.32
Cement Plaster,	97	Sq.Yd.	1.50	145.50
Painting, Cold Water,	27606	Sq.ft.	.02	552.12
" Lead & Oil, 3 Coats	1699	Sq.ft.	.0422	71.70
Hardware				.30
Scaffold				800.00
Plumbing				445.57
Gas Piping				309.10
				109906.43
FIELD OVERHEAD - 7%				7693.45
				117599.88
BUILDING CONTRACTOR'S PROFIT - 10%				11759.99
			TOTAL COST -	$129359.87

3525

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

ENGINE & EXHAUSTER HOUSE "E" & "E-1"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Steam Shovel	1281	Cu.Yd.	.41	525.21
Excavation, Wet,	95	Cu.Yd.	1.50	142.50
" Dry	68	Cu.Yd.	1.00	68.00
" Hauled	1241	Cu.Yd.	1.10	1365.10
Backfill	203	Cu.Yd.	.60	121.80
Sheet Piling, 14'0" Deep	139	Lin.ft.	6.60	917.40
Piles, Wood	212	No.	12.58	2666.96
Pile Capping, 12" x12"	5.052	M.B.M.	111.00	560.77
Decking, 3" x 6"	5.526	M.B.M.	97.00	245.02
Concrete, 1-3-5, Floor,	1-1/3	Cu.Yd.	10.69	14.25
Concrete Coping, Cast in Place	20	Cu.ft.	.71	14.20
Cement Finish, 1" Thick	153	Sq.ft.	.105	16.07
Forms, Coping	40	Sq.ft.	.106	4.24
Brickwork, Com.	213.822	M.	49.55	10594.98
Brickwork, Dentils	100	Lin.ft.	.25	25.00
Mason Centers	176	Sq.ft.	.263	46.29
Bluestone Coping	54	Cu.ft.	5.50	297.00
Cement Pile, Ridge,	38	Lin.ft.	1.00	38.00
Structural Steel	20587	Lbs.	.0623	1282.57
Cast Iron Columns	2165	Lbs.	.071	153.72
Misc. Iron				2379.00
Lumber, Truss, 12" Y.P.	.528	M.B.M.	116.60	61.56
" " 8" "	.288	M.B.M.	110.30	31.77
" " 6" "	.75	M.B.M.	110.30	82.73
" " 4" "	.766	M.B.M.	110.30	84.49
" 12" "	5.64	M.B.M.	101.60	573.02
" 9" "	2.497	M.B.M.	99.60	248.70
Sheathing, 1" x 9" T. & G.	2.513	M.B.M.	23.05	183.57
Ceiling, 1" x 4" M. & B.	2.376-	M.B.M.	89.60	212.99
Wainscot, 7/8" M. & B.	.657	M.B.M.	145.65	95.69
Floor, 1-1/4" x 3" T. & G.	1.336	M.B.M.	152.15	203.27
Slats, 1-3/4" x 2"	4712	Lin.ft.	.05	235.60
Wainscot, Cap, 5-Member,	128	Lin.ft.	.45	57.60
Moulding, 3-Member	186	Lin.ft.	.27	50.22
Cornice, Wood, 5-Member	128	Lin.ft.	.32	40.96
Moulding, 1" x 1½"	44	Lin.ft.	.04	1.76
Door, Double, Wood, Batten, Glazed, 4'0" x6'2"	2	Pr.	21.50	43.00
Doors, Double, Cast Iron Frame, Wood Panel, Glazed, with Semi-Cir. Transom, 5'0" x 12'9"	2	Pr.	53.50	107.00
Windows, Casement, Cast Iron Frame, 4 Sash, with Semi-Circular Sash above, 5'0" x 13'4"	7	No.	75.50	528.50

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

ENGINE & EXHAUSTER HOUSE "E" & "E-1"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Windows, Pivoted Sash, 2'8" x 4'0"	8	No.	16.50	132.00
Scuttle Covers, Glazed, 2'4" x 2'9"	2	No.	7.50	15.00
Blinds, Window, Wood, Tin Covered, 5'0" x 13'2"	1-1/2	Pr.	51.00	76.50
Blinds, Window, Wood, 5'0" x 13'2"	2-1/2	Pr.	26.00	65.00
Roofing, Slate	29.06	Sq.	23.00	668.38
Paper Under Slate	2906	Sq.ft.	.01	29.06
Flashing, Lead	72	Sq.ft.	.95	68.40
" G.I.	182	Sq.ft.	.35	63.70
Ridge Roll, G.I.	92	Lin.ft.	.60	55.20
Leader, G.I., 4" Round,	38	Lin.ft	.50	19.00
Cornice, G.L., 18" x 18"	36	Lin.ft.	1.20	43.20
Ventilator, G.I., 20" Dia., 5'0" High	2	No.	16.00	32.00
Corr. G.I.	484	Sq.ft.	.20	96.80
Gutter, Cast Iron	96	Lin.ft.	2.14	205.44
Vault Lights, 3'0" x 7'2"	2	No.	74.29	148.58
Hardware				30.50
Painting, 3 Coats L. & O.	3628	Sq.ft.	.0422	153.10
Painting, Cold Water	14528	Sq.ft.	.02	290.56
Scaffold				250.00
Louvre, 3'0" Round, Iron,	1	No.		28.28
Plumbing				53.76
Gas Piping				75.44
				26920.31
FIELD OVERHEAD - 7%				1884.41
				28804.62
BUILDING CONTRACTOR'S PROFIT - 10%				2880.46
TOTAL COST -				31685.08

3527

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

CARPENTER SHOP "E"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Dry	2	Cu.Yd.	1.00	2.00
" Hauled	-1/9	Cu.Yd.	1.10	.12
Backfill	1-8/9	Cu.Yd.	.60	1.13
Bluestone Pedestals	4	Cu.ft.	4.25	17.00
Cast Iron Columns	1308	Lbs.	.071	92.87
Lumber, 12" Y.P.	1.6	M.B.M.	101.60	162.56
" 8" "	.341	M.B.M.	95.30	32.50
" 6" "	.032	M.B.M.	95.30	3.05
" 4" "	1.195	M.B.M.	95.30	113.88
Sheathing, 1" Sq. Edge	1.29	M.B.M.	76.60	98.81
" & Floor, 1" x 10" T. & G.	2.671	M.B.M.	73.05	195.12
Floor, 2" x 10" T. & G. Y.P.	1.008	M.B.M.	101.60	102.41
Floor, 1" x 4" T. & G. "	.109	M.B.M.	116.50	13.71
Clapboard, 1" x 12"	1.208	M.B.M.	110.00	132.88
Wood Quoins,	59	Sq.ft.	1.05	61.95
Trim, 1" x 6"	306	Lin.ft.	.10	30.60
" 1" x 4"	102	Lin.ft.	.07	7.14
Moulding, 1½"	130	Lin.ft.	.035	4.55
Trim, 3/4" x 1½"	120	Lin.ft.	.035	4.20
" 1" x 12"	64	Lin.ft.	.18	11.52
" 1½" x 5"	84	Lin.ft.	.12	10.08
Base Board, 1½" x12"	64	Lin.ft.	.28	17.92
Window, D. H., 3'0" x 5'9"	2	No.	25.50	51.00
" " 3'6" x 6'3"	1	No.	27.25	27.25
Doors, Double, Wood Panel, 5'0" x 8'6"	1	Pr.	43.00	43.00
Roofing, Tar Paper	696	Sq.ft.	.015	10.44
Building Paper	1172	Sq.ft.	.01	11.72
Hardware				2.80
Painting, 3 Coats L. & O	1963	Sq.ft.	.0423	82.84
Heating				44.77
Gas Piping				29.53
				1418.35
FIELD OVERHEAD - 7%				99.28
				1517.63
BUILDING CONTRACTOR'S PROFIT - 10%				151.76
TOTAL COST -				1669.39

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

BOILER & ENGINE HOUSE "L"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Concrete, 1-3-5, Floor	4	Cu.Yd.	10.69	42.76
Lumber, 12" Y.P.	6.672	M.B.M.	101.60	677.88
" 10" "	1.12	M.B.M.	99.60	111.55
" 9" "	.068	M.B.M.	99.60	6.77
" 8" "	3.577	M.B.M.	95.30	340.89
" 6" "	2.012	M.B.M.	95.30	191.74
" 4" "	3.326	M.B.M.	95.30	316.97
Sheathing, 1" x 12" Sq. Edge	.971	M.B.M.	86.60	84.09
" 1" x 10" "	4.714	M.B.M.	81.60	384.66
" 1" x 6" "	2.728	M.B.M.	76.60	208.96
Floor, 3" x 12" Plank,	6.578	M.B.M.	96.60	635.43
" 1½" x 8" Sq.Edge Y.P.	2.194	M.B.M.	90.30	198.12
" 1½" x 4" T.& G.	.941	M.B.M.	116.60	109.72
Ceiling, 1" x 5" T. & G.	2.51	M.B.M.	71.60	179.72
Novelty Siding, 1" x 5"	.285	M.B.M.	110.00	31.35
Slats, 1½" x 3"	324	Lin.ft.	.042	13.61
" 2" x 2½"	216	Lin.ft.	.053	11.45
Trim, 1" x 2"	200	Lin.ft.	.04	8.00
Moulding, Cave,	200	Lin.ft.	.16	32.00
Trim, 1" x 4"	168	Lin.ft.	.07	11.76
Windows, D. H., 3'0" x 6'8"	8	No.	27.75	222.00
" D. H. 3'0" x 5' 2"	6	No.	24.00	144.00
Doors, Single, Wood Batten, 3'0" x 7'0"	1	No.	24.70	24.70
Doors, Single, Wood Batten, 3'0" x 6'10"	1	No.	24.00	24.00
Doors, Single, Wood Panel, 2'9" x 6'10"	1	No.	23.00	23.00
Doors, Single, Wood Panes, Glazed, 2'6" x 7'0"	1	No.	23.00	23.00
Doors, Double, Wood Batten, 6'0" x 6'10"	1	Pr.	42.00	42.00
Doors, Double, Wood Batten, Two Fixed Sash Above, 10'4" x 12'7"	1	Pr.	82.50	82.50
Skylight, Flat, Wood Frame, 3'4½" x 4'7"	2	No.	12.90	25.80
Roofing, Tar Paper, 2 Ply	2627	Sq.ft.	.015	39.41
Stairs, Wood, Open Risers, 2'5" Wide, with Handrail, 40 Treads.	1	No.	96.00	96.00
Pipe Handrail				27.12
Painting, 3 Coats, L. & O.	644	Sq.ft.	.0422	27.18
Whitewash	1982	Sq.ft.	.02	39.64
Doors, single, wood, Batten, 2'5"x6'6"	1	No.	18.00	18.00

3529

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

BOILER & ENGINE HOUSE "L"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Plumbing				21.48
Heating				31.90
Gas Piping				150.65
				4659.81
FIELD OVERHEAD - 7%				326.19
				4986.00
BUILDING CONTRACTOR'S PROFIT - 10%				498.60
TOTAL COST -				5484.60

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

PURIFIER HOUSE "C"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Piles, Wood,	24	No.	12.58	301.92
Pile Capping, 8" x 10"	2.453	M.B.M.	109.00	267.38
Lumber, Truss, 12" Y.P.	.224	M.B.M.	116.80	26.12
" " 8" "	.541	M.B.M.	110.30	59.67
" " 4" "	.038	M.B.M.	110.30	4.19
" 12" "	.216	M.B.M.	101.60	21.95
" 10" "	1.00	M.B.M.	99.60	99.60
" 8" "	.32	M.B.M.	95.30	30.50
" 6" "	.36	M.B.M.	95.30	34.31
" 4" "	.4	M.B.M.	95.30	38.12
Floor, 3" Plank	1.402	M.B.M.	90.30	126.60
Siding, 1" x 5"	1.226	M.B.M.	71.60	87.78
Sheathing, 1" x 9" T. & G.	.705	M.B.M.	73.05	51.50
Trim, 1½" x 6"	90	Lin.ft.	.16	14.40
" 1" x 6"	90	Lin.ft.	.10	9.00
Door, Double, Wood, Batten, 6'0" x 8'0"	1	No.	49.00	49.00
Window, D. H. 3'3" x 6'0"	1	No.	27.25	27.25
Ventilator, Wood 4'6" x 5'10" x 3'0"	1	No.	45.00	45.00
Roofing, Tar Paper	588	Sq.ft.	.015	8.82
Hardware				1.60
Painting, 3 Coats L & O	1886	Sq.ft.	.0422	79.59
				1384.30
FIELD OVERHEAD - 7%				96.90
				1481.20
BUILDING CONTRACTOR'S PROFIT - 10%				148.12
TOTAL COST -				1629.32

3531

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

PUMP HOUSE "P"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Lumber , 4" N.C.P.	.628	M.B.M.	79.60	49.99
Sheathing, 1" Sq. Edge	1.10	M.B.M.	71.60	78.76
" 1" x 10" T. & G.	.218	M.B.M.	73.00	15.92
" 1" x 5" "	1.027	M.B.M.	71.60	73.53
" 1" x 2½" "	.473	M.B.M.	145.65	68.89
Novelty Siding, 1"	.24	M.B.M.	110.00	26.40
Cornice, Wood, 5-Member	60	Lin.ft.	.41	24.60
Trim, Corner Boards, 1" x 3"	24	Lin.ft.	.07	1.68
" Moulding, 1½" x 3"	21	Lin.ft.	.08	1.68
" " 3/4" x 1"	21	Lin.ft.	.03	.65
" Nosing 1½" x 1-3/4"	21	Lin.ft.	.05	1.05
" Cove Moulding, 1" x 1"	21	Lin.ft.	.03	.63
" Nosing, 1" x 1½"	21	Lin.ft.	.04	.84
Door, Single, Wood Panel, Glazed, 3'0" x 7'4"	1	No.	26.00	26.00
Doors, Single, Wood Panel, Glazed, 3'0" x 6'7"	1	No.	24.50	24.50
Windows, D. H. 3'0" x 5'7"	2	No.	24.99	48.00
" Casement 2'0" x 2'6"	1	No.	8.50	8.50
" " 2'0" x 2'2"	1	No.	8.00	8.00
Roofing, Tar Paper	257	Sq.ft.	.015	3.86
Building Paper	766	Sq.ft.	.01	7.66
Hardware				3.85
Painting, Lead & Oil, 3 Coats	1743	Sq.ft.	.0422	73.55
				548.52
FIELD OVERHEAD - 7%				38.40
				586.92
BUILDING CONTRACTOR'S PROFIT - 10%				58.69
TOTAL COST -				645.61

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

COAL STORAGE HOUSE "Q"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Dry	1343	Cu.Yd.	1.00	1343.00
" Hauled	456	Cu.Yd.	1.10	501.60
Backfill	887	Cu.Yd.	.60	532.20
Piles, Wood,	420	No.	12.50	5283.60
Pile Capping, 12" x 12"	9.284	M.B.M.	111.00	1030.62
Concrete, 1-3-5, Footing	214-1/3	Cu.Yd.	10.69	2291.22
Forms, Footing	6562	Sq.ft.	.106	695.57
Brickwork, Com.	601.293	M.	49.55	29794.07
" Dentil	344	Lin.ft.	.25	86.00
Mason Centers,	291	Sq.ft.	.263	76.53
Bluestone Sills,	43.4	Cu.ft.	5.80	251.72
" Templates	42.5	Cu.ft.	4.25	100.63
" Flagstones	4753	Sq.ft.	.36	1711.09
Floor, 3" x 12" Plank,	15.555	M.B.M.	107.00	1664.39
Doors, Double, Wood Batten, Semi-Circ. Head, 9'0" x 10'10"	5	Pr.	65.00	325.00
Louvres, Wood, 4'0" x 4'1"	11	No.	20.00	220.00
" " 3'9" x 5'0"	2	No.	24.00	48.00
Hardware				28.00
Painting, 3 Coats L & O	2820	Sq.ft.	.0422	119.00
Scaffold				800.00
Plumbing				13.64
				46995.77
FIELD OVERHEAD - 7%				3289.70
				50285.47
BUILDING CONTRACTOR'S PROFIT - 10%				5028.55
TOTAL COST				55314.02

3533

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

COAL SHED

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Steam Shovel	1336	Cu.Yd.	.41	547.76
Excavation	1442	Cu.Yd.	1.00	1442.00
Backfill	1038	Cu.Yd.	.60	622.80
Haul	1740	Cu.Yd.	1.10	1914.00
Piles	311	No.	12.58	3912.38
Concrete Footings, 1-3-5	169	Cu.Yd.	10.69	1806.61
Footing Forms	1836	Sq.ft.	.106	194.62
Lumber, Pile Capping, 12" x 12"	8.592	M.B.M.	111.00	953.71
Brickwork, Com.	710.878	M.	49.55	35223.06
Mason Centers,	193	Sq.ft.	.283	50.76
Bluestone Sills, etc.	87	Cu.ft.	5.80	504.60
Flooring, 3" Plank,	21.825	M.B.M.	90.30	1970.80
Lumber, 12" Y.P.	6.932	M.B.M.	101.60	704.39
" 10" "	2.989	M.B.M.	99.60	297.70
" 8" "	.768	M.B.M.	95.30	73.19
" 6" "	.484	M.B.M.	95.30	46.13
" 4"	2.631	M.B.M.	95.30	250.73
Sheathing, 1"	10.233	M.B.M.	71.60	732.68
Roofing, Tar Paper,	7310	Sq.ft.	.015	109.65
Sliding Gates, 9'9" x 9'6"	3	No.	81.00	243.00
Hardware				78.35
Structural Steel	1561	Lb.	.0623	97.25
Ornamental Iron				336.86
Lintels, C.I.	16301	Lb.	.06	978.06
Columns, C.I.	2845	Lb.	.071	202.00
				53283.79
FIELD OVERHEAD - 7%				3729.87
				57013.66
BUILDING CONTRACTOR'S PROFIT - 10%				5701.37
TOTAL COST -				62715.03

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

TRESTLE

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Piles,	24	No.	12.58	301.92
Pile Capping, 12" x 12" Lumber	2.335	M.B.M.	111.00	225.66
Brickwork, Com.	27.48	M.B.M.	49.55	1361.63
Lumber, 14" Y.P.	1.736	M.B.M.	118.00	204.85
" 12" "	20.00	M.B.M.	111.00	2220.00
" 10" "	38.871	M.B.M.	109.00	4236.94
" 8" "	21.389	M.B.M.	103.00	2203.07
" 6" "	.6	M.B.M.	101.00	60.60
" 4" "	1.023	M.B.M.	95.50	97.49
" 1" "	.27	M.B.M.	99.60	26.89
Plank, 12"	45.386	M.B.M.	107.00	4845.60
Structural Steel	47202	Lb.	.0623	2940.68
Misc.Iron				223.20
Steel Floor Plates	46475	Lb.	.12	5577.00
Wood Stairs, 24 Treads,	1	No.	152.25	152.25
Wood Stairs, 53 Treads,				303.61
Gas Piping				178.94
				25160.53
FIELD OVERHEAD - 7%				1761.24
				26921.77
BUILDING CONTRACTOR'S PROFIT - 10%				2692.18
TOTAL COST -				29613.95

3535

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42ND STREET WORKS

VAULTS

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Steam Shovel	1187	Cu.Yd.	.41	486.67
Excavation	792	Cu.Yd.	1.00	792.00
Backfill	392	Cu.Yd.	.60	235.20
Haul	1587	Cu.Yd.	1.10	1745.70
Sheet Piling, 8'0" Deep	880	Lin.Ft.	4.68	4118.40
Piles	572	No.	12.66	7252.96
Pile Capping, 12" Lumber	10.56	M.B.M.	111.00	1172.16
Brickwork, Common	226.023	M.	49.55	11199.44
Brickwork, Floor Arches	176.946	M.	43.26	7654.68
Mason Centers	2128	Sq.Ft.	.263	559.66
Bluestone Flagging, 2"	11934	Sq.Ft.	.26	3102.84
Bluestone Flagging, 3"	11032	Sq.Ft.	.36	3971.52
Structural Steel	45200	Lb.	.0623	2815.96
Miscellaneous Iron				972.01
Doors, Double Slat, 13'4"x7'8"	1	Pr.	88.00	88.00
Doors, Double Bat. 13'4"x7'8"	3	Pr.	103.00	309.00
Doors, Single, Batten, 6'8"x7'8"	1	No.	55.00	55.00
Doors, Single, Batten, 3'3"x6'2"	1	No.	25.00	25.00
Doors, Single, Batten, 3'3"x6'6"	1	No.	28.00	28.00
Doors, Single, Batten, 3'0"x5'9"	1	No.	24.00	24.00
Doors, Double, Batten, 4'10"x6'5"	1	Pr.	36.00	36.00
Doors, Single, Batten, 3'6"x7'6"	1	No.	29.50	29.50
Doors, Single, Glazed, 3'6"x6'6"	1	No.	35.75	35.75
Doors, Double, Batten, 10'6"x8'3"	1	Pr.	97.00	97.00
Doors, Single, Batten, 4'0"x8'0"	1	No.	34.00	34.00
Windows, D.H., 3'6" x 5'6"	1	No.	28.00	28.00
Windows, Fixed, Semi-Circ., 3'3" Rad.	1	No.	32.50	32.50
Windows, Fixed, 2'0" x 3'8"	1	No.	11.20	11.20
Windows, Fixed, 3'4" x4'6"	1	No.	14.60	14.60
Windows, Fixed, 3'6" x 6'6"	2	No.	17.00	34.00
Sheet Iron Doors, 3'3"x6'2"	1	No.	20.05	20.05
Sheet Iron Doors, 3'6"x6'5"	1	No.	22.47	22.47
Hardware				7.25
Skylights, W.I. Frames, 3'7"x6'1"x2'9"	4	No.	108.83	435.32
Skylights, W.I. Frames, 3'7"x8'3"x2'6"	1	No.	147.70	147.70
Skylights, W.I. Frames, 3'7"x3'6"x2'6"	1	No.	62.65	62.65
Skylights, W.I. Frames, 4'0"x12'0"x2'0"	1	No.	192.00	192.00
Vault Lights	42	Sq.Ft.	3.00	126.00
Scaffold				850.00

CONSOLIDATED GAS COMPANY

42ND STREET WORKS

VAULTS

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Plumbing				623.10
Gas Piping				190.69
				49637.98
Field Overhead 7%				3474.66
				53112.64
Building Contractor's Profit 10%				5311.26
TOTAL COST			-	$58423.90

3537

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

"X" TANK HOUSE

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Lumber, 8" Y.P.	.12	M.B.M.	95.30	11.44
" 9" Plank	.572	M.B.M.	94.60	54.11
Struct. Steel	1080	Lb.	.0633	67.28
Corr. G.I. Roof	542	Sq.ft.	.22	119.24
Tin Covering on Floor,	238	Sq.ft.	.35	83.30
Ventilator, G.I., 12" Dia.	2	No.	10.00	20.00
Door, Sliding, Sheet Iron, 3'8" x 7'2"	1	Pr.	26.31	26.31
Windows, Steel, 2'6" x 2'6"	1	No.	5.00	5.00
Hardware				17.30
Ornamental Iron				316.92
Painting, Lead & Oil, 2 Coats	542	Sq.ft.	.0229	12.41
				733.31
FIELD OVERHEAD - 7%				51.33
				784.64
BUILDING CONTRACTOR'S PROFIT - 10%				78.46
TOTAL COST -				- 863.10

3538

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

SCALE HOUSE & LOCKERS "D-1"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Lumber, 6" N. C. P.	.274	M.B.M.	79.60	21.81
" 4" "	.277	M.B.M.	79.60	22.05
Sheathing, 1" Rough	.763	M.B.M.	71.60	54.63
Roofing, Tar Paper	504	Sq.ft.	.015	7.56
Skylight, Flat, Wood, 2'2" x 4'0"	1	No.	9.00	9.00
Painting, Lead & Oil, 3 Coats	190	Sq.ft.	.0422	8.02
White Wash	694	Sq.ft.	.02	13.88
Windows, Fixed, 1'8" x 3'6"	2	No.	9.50	19.00
Gas Piping				56.22
				212.17
FIELD OVERHEAD - 7%				14.85
				227.02
BUILDING CONTRACTOR'S PROFIT - 10%				22.70
TOTAL COST -				249.72

3539

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

PIER

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Piles,	370	No.	10.12	3744.40
Lumber, 12"	130.704	M.B.M.	111.00	14508.14
" 10" Braces	3.8	M.B.M.	107.00	406.60
Decking, 12"	64.35	M.B.M.	107.00	6885.45
Stone Filling,	5111	Cu.Yd.	3.10	15844.10
Mooring Posts	10	No.	27.00	270.00
Electric				180.30
				41838.99
FIELD OVERHEAD - 7%				2928.73
				44767.72
BUILDING CONTRACTOR'S PROFIT - 10%				4476.77
TOTAL COST -				49244.49

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

TOOL HOUSE #1

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation	-1/3	Cu.Yd.	1.00	.33
Backfill	.25	Cu.Yd.	.60	.15
Haul	-1/12	Cu.Yd.	1.10	.09
Cinder Fill	-1/3	Cu.Yd.	1.20	.40
Limestone Bondstones	1.3	Cu.ft.	4.25	3.33
Lumber, 12" Spruce	.042	M.B.M.	96.60	4.06
" 10" "	.085	M.B.M.	94.10	8.00
" 8" "	.106	M.B.M.	87.60	9.28
" 6" "	.076	M.B.M.	86.50	6.57
" 4" "	.214	M.B.M.	86.50	18.81
Roof & Siding, Corr. G.I.	283	Sq.ft.	.20	56.60
Flooring, Rough, 2" Y.P.	.14	M.B.M.	90.30	12.64
Door, Batten, 4'6" x 6'6"	1	Pr.	15.00	15.00
Hardware				1.35
Painting, Lead & Oil, 2 Coats	319	Sq.ft.	.0239	7.31
White Wash	319	Sq.ft.	.02	6.38
				152.16
FIELD OVERHEAD - 7%				10.65
				162.83
BUILDING CONTRACTOR's PROFIT - 10%				16.28
TOTAL COST -				179.11

3541

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

43nd STREET WORKS

RAMP ADJOINING "E"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation	1	Cu.Yd.	1.00	1.00
Backfill	-1/3	Cu.Yd.	.60	.20
Haul	-2/3	Cu.Yd.	1.10	.73
Brickwork,Com.	.393	M.	49.55	19.47
Brownstone - Bondstone	6	Cu.ft.	4.25	25.50
Bluestone	15	Cu.ft.	4.25	63.75
Lumber, 12" Y.P.	.042	M.B.M.	101.60	4.27
" 10" "	.187	M.B.M.	99.60	18.63
" 8" "	.44	M.B.M.	95.30	41.93
" 6" "	.15	M.B.M.	95.30	14.30
Flooring, 3" Plank,	1.256	M.B.M.	90.30	113.42
" 4" "	.77	M.B.M.	90.30	69.53
Cast Iron Cols.	1150	Lb.	.071	81.65
Misc. Iron				68.34
				522.72
		FIELD OVERHEAD - 7%		36.59
				559.31
		BUILDING CONTRACTOR'S PROFIT - 10%		55.93
		TOTAL COST	-	615.24

CONSOLIDATED GAS COMPANY

42ND STREET WORKS

HOSE HOUSE

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Lumber, 4" - N.C.P.	.063	M.B.M.	79.60	5.01
Sheathing, 1-1/4" x 4" T&G	.054	M.B.M.	81.60	4.41
Sheathing, 1" x 8" T&G	.03	M.B.M.	72.30	2.17
Trim, 1-1/8" x 6"	14	Lin.Ft.	.12	1.68
Trim, 1-1/8" x 1-1/2"	4	Lin.Ft.	.05	.20
Door, Single, Wood, Batten, 2'11"x4'3"	1	No.	6.50	6.50
Roofing, Tar Paper	13	Sq.Ft.	.015	.20
Hardware				.85
Painting, 3 Coats, Lead and Oil	73	Sq.Ft.	.0422	3.08
				24.10
Field Overhead 7%				1.69
				25.79
Building Contractor's Profit 10%				2.58
TOTAL COST	-			$ 28.37

3543

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

RAMP ADJOINING COAL SHED #2

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation	57	Cu.Yd.	1.00	57.00
Backfill	45	Cu.Yd.	.60	27.00
Haul	12	Cu.Yd.	1.10	13.20
Rubble Stone	125	Cu.ft.	.61	76.25
Brickwork	9.723	M.	49.55	481.77
Bluestone, Bond,	2	Cu.ft.	4.25	8.50
Lumber, 8" Y.P.	4.107	M.B.M.	95.30	391.40
" 6" "	.064	M.B.M.	95.30	6.10
Flooring, 3" x 9" Y.P.	.865	M.B.M.	94.60	81.83
" 3" x 12" "	6.541	M.B.M.	96.50	631.86
Brick Pavement	14	Sq.Yd.	2.29	32.06
				1806.97
	FIELD OVERHEAD - 7%			126.49
				1933.46
	BUILDING CONTRACTOR'S PROFIT - 10%			193.35
	TOTAL COST	-		2126.81

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

PUMP HOUSE

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Cinder Fill	1	Cu.Yd.	1.20	1.20
Concrete Floor, 1-3-5	1	Cu.Yd.	10.69	10.69
Lumber, 4" N.C.P.	.516	M.B.M.	79.60	41.07
Sheathing, 1" x 8" T.& G.	.143	M.B.M.	72.30	10.34
" 1" x 2½" T.& G.	.194	M.B.M.	145.65	28.26
" 1" x 5" T.& G.	.128	M.B.M.	71.60	9.16
Flooring, 1" x 8" T.& G.	.13	M.B.M.	72.30	9.40
Doors, Single, Wood, Panel, Glazed, 2'5" x 6'4"	1	No.	24.50	24.50
Window, Sliding, 3'0" x 3'0"	1	No.	9.85	9.85
Window, Sliding, 3'0" x 1'9"	1	No.	8.60	8.60
Window, Sliding, 2'4" x 1'9"	1	No.	7.50	7.50
Ventilator, Wood, 2'6" x 2'6"x 2'0" H.	1	No.	43.50	43.50
Roofing, Tar Paper	119	Sq.ft.	.015	1.79
Hardware				.95
Painting, 3 Coats L.& O	960	Sq.ft.	.0422	40.51
				247.32
FIELD OVERHEAD - 7%				17.31
				264.63
BUILDING CONTRACTOR'S PROFIT - 10%				26.46
TOTAL COST - 291.09				

3545

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

TAR WELL HOUSE

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Lumber, 4" N.C.P.	.117	M.B.M.	76.60	8.96
Sheathing, 1" Sq. Edge	.424	M.B.M.	76.60	32.48
Floor, 2" Plank, Y.P.	.044	M.B.M.	90.30	3.97
Door, Batten, Sheet Iron Covered 1 Side, 2'9" x 7'0"	1	No.	23.10	23.10
Corr. G.I.	193	Sq.ft.	.20	38.60
Hardware				1.85
Painting, 2 Coats L & O	193	Sq.ft.	.0239	4.42
				113.38
FIELD OVERHEAD - 7%				7.94
				121.32
BUILDING CONTRACTOR'S PROFIT - 10%				12.13
TOTAL COST - -				133.45

3546

CONSOLIDATED GAS COMPANY

42ND STREET WORKS

COKE OFFICE - "H"

COST AS OF JUNE 1ST, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Dry	68	Cu.Yd.	1.00	68.00
Excavation, Hauled	43	Cu.Yd.	1.10	47.30
Backfill	25	Cu.Yd.	.60	15.00
Concrete, 1-3-5, Foundation Floor	5	Cu.Yd.	10.69	53.45
Forms, Footing	44	Sq.Ft.	.106	4.66
Brickwork, Common	14.049	M.	49.55	696.13
Brickwork, Dentil	23	Lin.Ft.	.25	5.75
Brickwork, Corbel	42	Lin.Ft.	.15	6.30
Bluestone - Sills and Lintels	10.4	Cu.Ft.	5.80	60.32
Bluestone - Coping	17	Cu.Ft.	5.50	93.50
Lumber, 8" - Spruce	.256	M.B.M.	87.50	22.40
Flooring, 1" x 3-1/2" T&G	.312	M.B.M.	145.65	45.44
Flooring, 1" Sq. Edge	.129	M.B.M.	76.60	9.88
Sheathing, 1" x 3-1/2" T&G	.839	M.B.M.	145.65	122.20
Moulding, 2" x 3"	44	Lin.Ft.	.13	5.72
Baseboard, 1" x 4" - D4S	44	Lin.Ft.	.07	3.08
Doors, Single, Wood Panel, Glazed with Wood cover - with Trans., 3'3" x 9'0"	1	No.	37.00	37.00
Door, Single, Wood Panel, Glazed with Transom - 3'3" x 9'0"	1	No.	34.00	34.00
Window, D.H., 3'0" x 6'0"	1	No.	25.05	25.05
Window, D.H., 4'0" x 6'0"	1	No.	28.40	28.40
Window, D.H., 3'0" x 4'0"	1	No.	22.20	22.20
Roofing, Tar and Graval	117	Sq.Ft.	.13	15.21
Flashing, G.I.	68	Sq.Ft.	.25	17.00
Leaders, G.I., 4" Dia.	12	Lin.Ft.	.50	6.00
Hardware				4.90
Painting, 3 Coats, Lead and Oil	764	Sq.Ft.	.0422	32.24
Plumbing				100.72
Gas Piping				56.35
				1638.20
Field Overhead 7%				114.67
				1752.87
Building Contractor's Profit 10%				175.39
TOTAL COST -				$1928.16

3547

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

DUMP

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Earth Fill	167	Cu.Yd.	0.00	0.00
Lumber, 12" Y.P.	4.39	M.B.M.	101.60	446.02
" 10" "	.586	M.B.M.	99.60	58.37
" 8" "	.64	M.B.M.	95.30	60.99
" 6" "	2.55	M.B.M.	95.30	243.02
Sheathing, Sq. Edge, 2" x 10" Y.P.	.88	M.B.M.	94.60	83.35
Flooring, 4" x 12" "	6.6	M.B.M.	96.60	637.56
				1539.21
		FIELD OVERHEAD - 7%		107.04
				1636.25
		BUILDING CONTRACTOR'S PROFIT - 10%		163.63
		TOTAL COST -		1799.88

3548

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

SHED IN COAL SHED "S"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Lumber, 4" N.C.P.	.53	M.B.M.	79.60	42.19
Flooring & Sheathing, 7/8" T. & G.	.2	M.B.M.	71.60	14.32
Roofing, Canvass,	16	Sq.ft.	.15	2.40
Door, Batten, 1'10" x 5'9"	1	No.	7.20	7.20
Windows, Fixed, 0'10" x 1'0"	2	No.	4.00	8.00
Hardware				.60
Painting, Lead & Oil, 2 Coats	112	Sq.ft.	.0229	2.56
				77.27
FIELD OVERHEAD - 7%				5.41
				82.68
BUILDING CONTRACTOR'S PROFIT - 10%				8.27
TOTAL COST -				90.95

3549

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

"T-1" TANK HOUSE - NORTH

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Lumber, 10" Y.P.	1.29	M.B.M.	99.60	128.48
" 8" "	.9	M.B.M.	95.30	85.77
" 6" "	.3	M.B.M.	95.30	28.59
" 4" "	.107	M.B.M.	95.30	10.20
" 1" T. & G.	.677	M.B.M.	71.80	48.47
Roofing, Tar Paper	110	Sq.ft.	.015	1.65
Door, Batten, 2'10" x 6'0"	1	No.	19.00	19.00
Hardware				.65
Painting, Lead & Oil, 3 Coats	432	Sq.ft.	.0422	18.23
				341.04
FIELD OVERHEAD - 7%				23.87
				364.91
BUILDING CONTRACTOR'S PROFIT - 10%				36.49
TOTAL COST -				401.40

3550

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

SO. TANK HOUSE "T-1"

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Lumber, 10" Y.P.	.912	M.B.M.	99.60	90.84
" 8" "	1.044	M.B.M.	95.30	99.49
" 4" "	.785	M.B.M.	95.30	74.81
" 1" T. & G.	.604	M.B.M.	71.80	43.25
Roofing, Tar Paper	99	Sq.ft.	.015	1.49
Hardware				1.30
Doors, Batten, 2'10" x 6'0"	2	No.	17.50	35.00
Painting, Lead & Oil, 3 Coat	326	Sq.ft.	.0422	13.76
				359.94
FIELD OVERHEAD - 7%				25.20
				385.14
BUILDING CONTRACTOR'S PROFIT - 10%				38.51
TOTAL COST -				423.65

3551

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

LOADING PLATFORM

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Lumber, 12" Y.P.	.176	M.B.M.	101.60	17.88
" 10" "	.042	M.B.M.	99.60	4.18
" 8" "	.264	M.B.M.	95.30	25.15
" 6" "	.024	M.B.M.	95.30	2.29
Stairs with Rails, 4'0" Wide, 17 Treads	1	No.	62.00	62.00
Painting, Lead & Oil, 3 Coats	220	Sq.ft.	.0422	9.28
				120.78
FIELD OVERHEAD - 7%				8.46
				129.24
BUILDING CONTRACTOR'S PROFIT - 10%				12.93
TOTAL COST -				142.17

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

SCALE HOUSE

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Lumber, 10" Y.P.	.269	M.B.M.	99.60	26.79
" 6" "	.26	M.B.M.	95.30	24.78
" 4" "	.56	M.B.M.	95.30	53.37
" 1" T. & G.	2.04	M.B.M.	71.60	146.06
Corner Boards, 1½" x 3"	40	Lin.ft.	.06	2.40
Roofing, Tar & Felt	448	Sq.ft.	.13	58.24
Windows, Casement, Piveted. 2'10" x 4'6"	2	No.	12.90	25.80
				337.44
FIELD OVERHEAD - 7%				23.62
				361.06
BUILDING CONTRACTOR'S PROFIT - 10%				36.11
TOTAL COST				- 397.17

3553

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

VALVE PITS

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation	25	Cu.Yd.	1.00	25.00
Backfill	10	Cu.Yd.	.60	6.00
Haul	15	Cu.Yd.	1.10	16.50
Brickwork, Com.	.945	M.B.M.	49.55	46.82
				94.32
FIELD OVERHEAD - 7%				6.60
				100.92
BUILDING CONTRACTOR'S PROFIT - 10%				10.09
				111.01

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

FENCES

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation, Wet,	45	Cu.Yd.	1.50	67.50
" Dry	491	Cu.Yd.	1.00	491.00
" Hauled	112	Cu.Yd.	1.10	123.20
Backfill	424	Cu.Yd.	.60	254.40
Post Holes	196	No.	.75	147.00
Piles, Wood	40	No.	12.58	503.20
Pile Capping, 12" x 12"	2.448	M.B.M.	111.00	271.73
Brickwork, Common	255.759	M.	49.55	12672.86
" Dentil	334	Lin.ft.	.25	83.50
Bluestone - Coping	489	Cu.ft.	5.50	2689.50
" Sills, W. T.	124.7	Cu.ft.	5.80	723.26
" Quoins,	32	Cu.ft.	5.80	185.60
Iron Picket Fence				2280.57
Lumber, 12" Y.P.	4.272	M.B.M.	101.60	434.04
" 10" "	9.836	M.B.M.	99.60	979.67
" 8" "	3.846	M.B.M.	95.30	366.52
" 6" "	5.198	M.B.M.	95.30	495.37
" 4" "	1.715	M.B.M.	95.30	163.44
Sheathing, 4" x 12" Sq.Edge Y.P.	2.352	M.B.M.	96.60	227.20
" 3" x 12" " "	2.598	M.B.M.	96.60	250.97
" 2" x 10" " "	.934	M.B.M.	94.60	88.36
" 3" x 8" " "	3.392	M.B.M.	90.30	306.30
" 2" x 6" " "	.14	M.B.M.	90.30	12.64
" 1" x 10" " "	1.3	M.B.M.	73.05	94.97
" 1¼" x 9"	1.858	M.B.M.	81.60	151.61
" 1" x 12"	.076	M.B.M.	74.80	5.68
" 1¼" x 10" M.B.C.B.	2.011	M.B.M.	83.05	167.01
" 1¼" x 6" "	1.919	M.B.M.	81.60	156.59
" 1¼" x 5" M. & B.	2.075	M.B.M.	81.60	169.32
" 1" x 6" M.B.C.B	1.173	M.B.M.	76.60	89.85
Post, 4" Dia., 11'5" Long	1	No.	1.70	1.70
Post, 5" Dia. 11'6" Long	1	No.	1.75	1.75
Base, 2" x 10"	108	Lin.ft.	.176	19.01
Base, 1" x 12"	287	Lin.ft.	.115	33.01
Base, 1" x 10"	166	Lin.ft.	.108	17.93
Cap, 1¼" x 3"	212	Lin.ft.	.06	12.72
Cap, 2-1/8" x 4"	98	Lin.ft.	.13	12.74
Cap, 1" x 5"	75	Lin.ft.	.08	6.00
Cap, 1" x 6"	103	Lin.ft.	.09	9.27
Waterstable, 1¼" x1⅝/4"	212	Lin.ft.	.05	10.60
Fascia, 1" x 1"	46	Lin.ft.	.025	1.15
Fascia, 1" x 2"	46	Lin.ft.	.03	1.38
Sheathing, 1" x 5", M&B	.8	M.B.M.	76.60	61.28

3555

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

FENCES

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Moulding, 7/8" x 1-3/4"	75	Lin.ft.	.04	3.00
" 1-1/4" x 2-1/4"	103	Lin.ft.	.05	5.15
Gates, Double, Wood, with 2 Sheathed Panel Doors, 10'0" x 13'0"	1	Pr.	126.00	126.00
Gates, Double, Wood, Picket, 12'0" x 14'0"	1	Pr.	96.00	96.00
" Double, Wood, Batten, 12'6" x 13'0"	1	Pr.	77.50	77.50
" Double, Wood, Batten, 8'6" x 10'0"	1	Pr.	57.50	57.50
" Double, Wood, Sheathed Panel, 9'0" x 10'0"	2	Pr.	82.50	165.00
" Double, Wood, Batten, 8'0" x 10'0"	3	No.	52.00	156.00
" Vertical, Sliding, 8'4" x 8'6"	1	No.	45.00	45.00
" Double, Wood Batten, 9'9" x 14'0"	1	Pr.	85.00	85.00
" Double, Wood, Batten, 11'0" x 14'0"	1	Pr.	130.50	130.50
" Double, Wood Batten, Wire Mesh Above, 10'6" x 12'0"	1	Pr.	119.00	119.00
Door, Single, Wood, Batten, 2'3" x 5'6"	1	No.	9.40	9.40
Gates, Double, Wood Batten, Panel Door, Wire Mesh Above, 10'9" x 15'0"	1	Pr.	140.00	140.00
Door, Single, Wood, Batten, 2'0" x 6'6"	1	No.	8.20	8.20
Barbed Wire	700	Lin.ft.	.015	10.50
Rods, Bolts, etc.	848	Lbs.	.15	127.20
Braces, Steel Angles	367	Lbs.	.078	28.63
Turnbuckles, 3/4" x 7"	19	No.	2.00	38.00
Ornamental Lamp	1	No.	50.00	50.00
Hardware				110.15
Painting, 3 Coats, L & O	11951	Sq.ft.	.0422	504.33
Painting, 2 Coats, L & O	4120	Sq.ft.	.0229	94.35
Cap, 2" x 8"	110	Lin.ft.	.28	30.80
Scaffold				600.00
				27658.81
FIELD OVERHEAD -7%				1938.10
				29594.71
BUILDING CONTRACTOR'S PROFIT - 10%				2959.47
TOTAL COST -				32554.18

3556

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

PAVING

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Excavation	3-1/3	Cu.Yd.	1.00	3.33
Backfill	3-2/3	Cu.Yd.	.60	1.60
Haul	2/3	Cu.Yd.	1.10	.73
Belgian Block	2106	Sq.Yd.	4.21	8866.26
Bluestone Flagging	2465	Sq.ft.	.36	887.40
Brick Pavement	17	Sq.Yd.	2.29	38.93
Concrete Pavement	354	Sq.ft.	.36	127.44
Blue Stone Curbs	47	Cu.ft.	2.55	119.85
Checkered Steel Plates	48899	Lb.	.07	3422.93
Lumber, 12" Y.P.	1.04	M.B.M.	101.60	105.66
Lumber, 10" "	3.2	M.B.M.	99.60	318.72
Lumber, 3" Plank, Y.P.	13.17	M.B.M.	90.30	1189.35
				15083.10
	FIELD OVERHEAD - 7%			1055.75
				16137.85
BUILDING CONTRACTOR'S PROFIT - 10%				1613.79
	TOTAL COST	-		17751.64

3557

COPY BOUND CLOSE IN CENTER

CONSOLIDATED GAS COMPANY

42nd STREET WORKS

OUTSIDE GAS LIGHTING

COST AS OF JUNE 1, 1923.

	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Gas Piping				574.23
FIELD OVERHEAD - 7%				40.20
				614.43
BUILDING CONTRACTOR'S PROFIT - 10%				61.44
TOTAL COST -				675.87

3558

COPY BOUND CLOSE IN CENTER

[fol. 3559] UNITED STATES DISTRICT COURT, SOUTHERN DISTRICT OF NEW YORK

In Equity. No. 26-366

CONSOLIDATED GAS COMPANY OF NEW YORK, Plaintiff,

against

ALBERT OTTINGER, as Attorney-General of the State of New York, Defendant

STIPULATION AS TO PLAINTIFF'S EXHIBIT NO. 838A

It is stipulated and agreed that Plaintiff's Exhibit No. 838A, consisting of 149 pages, which is endorsed "Consolidated Gas Company, Inventory & Reproduction Costs of Structures & Appurtenances as of June 1, 1923, Volume II," be not printed in full, but that there be printed the following pages, which contain summaries of the detail costs:

Page entitled "Consolidated Gas Company, General Summary of Costs and Page Index of Stations and Miscellaneous Locations;"

Pages setting forth "General Summary of Costs upon a Subcontract Basis as of June 1, 1923," of the structures and appurtenances, respectively, at the several stations and miscellaneous locations mentioned in the General Summary of Costs.

It is further stipulated and agreed by the defendant Attorney General and appellant, but only for the purposes [fol. 3560] of this appeal:

(a) That the structures and appurtenances set forth in Plaintiff's Exhibit No. 838A were in existence on June 1, 1923;

(b) That the structures and appurtenances set forth in Plaintiff's Exhibit No. 838A were used and useful in the business of the plaintiff and appellee on June 1, 1923;

(c) That the quantities, units, unit prices and total cost contained in Plaintiff's Exhibit No. 838A are a correct estimate of the cost to reproduce as of June 1, 1923, each and every item contained in said exhibit on a subcontract basis as the same is described in the testimony of Henry

Burt, upon the trial. It is understood, however, that the appellant does not, by so stipulating, concede that the subcontractor's profit is properly included in such an estimate of the cost to reproduce, or that the figure for field overhead should be included or is in the proper amount. Appellant reserves the right to contest on this appeal the propriety and amount of both field overhead and subcontractor's profit.

Dated New York, April 27, 1926.

Shearman & Sterling, Solicitor for Plaintiff and Appellee. John Holley Clark, Jr., Solicitor for Defendant Attorney General and Appellant.

[fol. 3561] PLAINTIFF'S EX. No. 838 H

Consolidated Gas Company

General Summary of Costs and Page Index of Stations and Miscellaneous Locations

Stations:	Total cost	Pages
Kingsbridge Holder Station	$218,061 04	1-8
West 132nd Street Station	70,874 57	1-9
West 131st Street Emergency Station	6,608 91	1
East 111th Street Station	304,315 00	1-32
West 65th Street Station	348,822 92	1-30
East 63rd Street Station	52,382 62	1-3
West 44th Street station	92,313 65	1-8
East 17th Street Yard	42,515 85	1-11
15th Street Station	79,360 02	1-11
Misc. Locations:		
General Office Building, 15th St. & Irv. Pl.	$5,469,220 30	1-2
General Office Bldg. Annex, East 15th St.	52,952 03	1-2
West 159th Street Shop	113,656 66	1-5
212 West 57th Street Office	351,635 16	1-5
2084 Third Avenue Office	146,202 21	1-8
Hester Street Offices & Shop	220,032 21	1-14
Grand Total	$7,568,953 15	

NOTE.—No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

NOTE.—The above totals include the amounts applied to the total costs of the respective structures, for Field Overhead varying from 5-8% and for Building Contractor's Profit of 10% as described in the testimony of Henry R. Burt.

[fol. 3562] Consolidated Gas Company

Kingsbridge Holder Station

General Summary of Costs upon a Sub-contract Basis as of June 1, 1923

Structure:	Total cost	Pages
"A"—Governor House	$206,311 44	1-3
Appurtenances:		
—Fences	7,781 50	4
—Paving	1,825 56	5
—Misc. Outside Pits	2,142 54	6-8
Grand Total	$218,061 04	

NOTE.—No allowance made in above for General Contractor's Expense and Profit, Administrative, Interest and Taxes or other undistributed costs during construction.

[fol. 3563] Consolidated Gas Company

West 132nd Street Station

General Summary of Costs upon a Sub-contract Basis as of June 1, 1923

Structures:	Total cost	Pages
"A"—Governor House	$43,778 53	1-2
"B"—Boiler House	19,828 03	3
—Garage	445 49	4
—Coal Bins	2,550 50	5
—Watchman's Shanty	49 06	6
—Misc. Pits	798 80	7
Appurtenances:		
—Fences	2,907 34	8
—Pavement	516 82	9
Grand Total	$70,874 57	

Note.—No allowance made in above for General Contractor's Expense and Profit, Administrative, Interest and Taxes or other undistributed costs during construction.

[fol. 3564] Consolidated Gas Company

West 131st Street

General Summary of Costs upon a Sub-contract Basis as of June 1, 1923

Structure:	Total cost	Pages
Emergency Station	$6,608 91	1
Grand Total	$6,608 91	

Note.—No allowance made in above for General Contractor's Expense and Profit, Administrative, Interest and Taxes or other undistributed costs during construction.

[fol. 3565] Consolidated Gas Company

East 111th Street Station

General Summary of Costs upon a Sub-contract Basis as of June 1, 1923

Structures:	Total cost	Pages
"B"—Exhauster House	$55,589 88	1-2
"C"—Boiler House	6,796 12	3
"V"—Wagon Shed	4,206 03	4
"S"—Street Dept. & Storage	23,346 13	5-6
"X"—Derrick Shed	510 20	7
"N"—Stable & Garage	72,900 84	8-9
"E"—Office	1,477 26	10
"D"—Emergency Wagon House	5,582 89	11
"J"—Wagon House & Blacksmith Shop	8,800 31	12
"M"—Garage	8,176 81	13-14
"M-1"—Portable Steel Garage	1,145 89	15
—Shed	91 25	16
—Portable Tool House	128 62	17
"Q"—Coke Storage Bin	2,829 98	18
"H"—Weigh House	6,591 01	19-20
"X-3"—Watchman's Shanty	117 26	21
—Coke Loading Shanty	448 29	22
"P"—Coke Screen	48,424 41	23
"R"—Trestle	5,560 31	24
"P"—Coke Loading Trolley	1,128 46	25
—Misc. Pits	2,123 50	26-28
Appurtenances:		
—Fences	21,307 79	29-30
—Pavements	26,959 14	31
—Yard Lighting	72 62	32
Grand Total Cost	$304,315 00	

NOTE.—No allowance made in above for General Contractor's Expense and Profit, Administrative, Interest and Taxes or other undistributed costs during construction.

[fol. 3566] Consolidated Gas Company

West 65th Street Station

General Summary of Costs upon a Sub-contract Basis as of June 1, 1923

	Total cost	Pages
Structures:		
Engine & Valve House	$36,148 41	1-3
Boiler House	20,105 13	4
Office Building "R"	34,420 95	5-6
Meter Repair Shop	121,067 20	7-9
Emergency Wagon House	7,604 89	10-11
Oil House "J"	322 27	12
Waste Shed	224 19	13
Pipe & Scrap Storage	209 56	14
Pipe Rack & Shed	688 25	15
Oil House "G"	189 70	16
Derrick Shed	745 37	17
Gasoline Shed	55 19	18
Scale House	636 26	19
Blacksmith Shop	574 11	20
Storage Shed	603 96	21
Pipe Rack "L"	1,145 94	22
Carpenter Shop	673 30	23
Wagon Shed & Garage	4,826 06	24
Appurtenances:		
Fences	82,644 36	25-26
Pavements	34,731 14	27
Outside Pits	559 99	28-29
Sewers	646 69	30
Grand Total	$348,822 92	

NOTE.—No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

[fol. 3567] Consolidated Gas Company

63rd Street Station

General Summary of Costs upon a Sub-contract Basis as of June 1, 1923

	Total cost	Pages
Fences	$28,102 89	1
Pavements	4,869 59	2
Retaining Wall	19,410 14	3
	$52,382 62	

Note.—No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

[fol. 3568] Consolidated Gas Company

West 44th Street Station

General Summary of Costs upon a Sub-contract Basis as of June 1, 1923

Structures:	Total cost	Pages
"A"—Valve House	$9,188 87	1-2
"B"—Storage Shed	2,570 44	3
—Boiler & Engine Room	13,706 12	4-5
Appurtenances:		
Fences	63,558 91	6-7
Pavements	3,289 31	8
Grand Total	$92,313 65	

Note.—No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

[fol. 3569] Consolidated Gas Company

17th Street Yard

General Summary of Costs upon a Sub-contract Basis as of June 1, 1923

Structures:	Total cost	Pages
Office & Scale House	$1,335 20	1
Store House & Shed	3,485 04	2
Storage & Work Shed	4,939 44	3
Blacksmith Shop	5,390 54	4
Shed	11,287 27	5
Engine House	716 80	6
Pipe Racks & Fitting Slabs	5,675 69	7
Appurtenances:		
Fences	2,947 38	8
Pavements	6,141 30	9
Outside Gas Lighting	232 73	10
Yard Lighting & #5 Shed	364 46	11
Grand Total	$42,515 85	

NOTE.—No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

[fol. 3570] Consolidated Gas Company

15th Street Holder Station

General Summary of Costs upon a Sub-contract Basis as of June 1, 1923

Structures:	Total cost	Pages
"R"—Exhauster House	$44,672 42	1-2
—Boiler House	23,124 87	3-4
—Oil Storage House	383 55	5
—Hose House	34 67	6
"P"—Storage	1,310 41	7
—Misc. Pits	135 01	8
Appurtenances:		
—Pavement	4,093 62	9
—Fences	5,705 47	10-11
Grand Total	$79,360 02	

Note.—No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

[fol. 3571] Consolidated Gas Company

15th Street & Irving Place

General Summary of Costs upon a Sub-contract Basis as of June 1, 1923

Structure:	Total cost	Pages
—General Office Buliding	$5,469,220 30	1-2

Note.—No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

[fol. 3572] Consolidated Gas Company

East 15th Street

General Summary of Costs upon a Sub-contract Basis as of June 1, 1923

Structure:	Total cost	Pages
....—General Office Building Annex	$52,952 03	1-2

NOTE.—No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

[fol. 3573] Consolidated Gas Company

474 West 159th Street

General Summary of Costs upon a Sub-contract Basis as of June 1, 1923

	Total cost	Pages
Shop	$113,536 56	1-4
Pavement	120 10	5
Grand Total	$113,656 66	

NOTE.—No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

[fol. 3574] Consolidated Gas Company

212 West 57th Street

General Summary of Costs upon a Sub-contract Basis as of June 1, 1923

Structure:	Total cost	Pages
....—Branch Office #4	$351,635 16	1-5

NOTE.—No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

[fol. 3573] Consolidated Gas Company

2084 Third Avenue

General Summary of Costs upon a Sub-contract Basis as of June 1, 1923

Structures:	Total cost	Pages
Office	$59,069 86	1-4
Office—175 E. 114th St.	86,936 50	5-7
Appurtenances:		
Paving & Fences	204 85	8
Grand Total	$146,202 21	

Note.—No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

[fol. 3576] Consolidated Gas Company

Hester Street—Offices & Shop

General Summary of Costs upon a Sub-contract Basis as of June 1, 1923

Structures:	Total cost	Pages
—Office Building	$91,327 30	1-5
—Office "B"	35,666 50	6-8
—Stove Shop "D"	89,756 12	9-14
Appurtenances:		
—Fences	919 51	13
—Pavement	2,362 78	14
Grand Total	$220,032 21	

Note.—No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

[fol. 3576a] PLAINTIFF'S EX. NO. 839

Consolidated Gas Company

Expenditures, etc.

[fol. 3577] Consolidated Gas Company

Expenditures Necessary to Put the Buildings of the Consolidated Gas Company in the Condition in Which They Were When New

Summary

Location	Expenditures, total
Works:	
11th Street Works	$2,923 00
21st Street Works	62,644 00
99th Street Works	3,149 00
14th Street Works	
42nd Street Works	
Misc. Locations:	
Kingsbridge Holder Station	
West 132nd Street Station	150 00
West 131st Street Emergency Station	88 00
East 111th Street Station	1,086 00
West 65th Street Station	3,103 00
East 63rd Street Station	550 00
West 44th Street Station	623 00
East 17th Street Yard	258 00
East 15th Street Holder Station	1,336 00
General Office Building	27,300 00
General Office Building Annex	660 00
West 159th Street Shop	851 00
212 W. 57th Street Office	114 00
2084 Third Ave. Office	246 00
Hester Street Offices & Shop	537 00
Grand Total	$105,618 00

[fol. 3578] Consolidated Gas Company

11th Street Works

Building "L-M"—Office, Shops, etc.:

		Expenditures, total
Straighten Louvres	$30 00	
Repair Ridge	20 00	
3 Large Lights Clear Glass	9 00	
14 Small Lights Clear Glass	14 00	
3 Door Saddles	6 00	
20 Treads and Winders	160 00	
Repair Cracked Cement Floor	80 00	
Repair Door	8 00	
New Stone Sill	20 00	
Repair Slate Roof	300 00	
Replace Floor in Carpenter Shop	235 00	
Repair Brickwork	150 00	
Brick Patching	30 00	
Repair Window Guard	16 00	
Patch Concrete floor in 4 locations	40 00	
		$1,118 00
Generator House "A":		
Slight Pointing	60 00	
27 Lights of Glass	54 00	
Repair Floor	120 00	
		234 00
Condenser House "G":		
Slight Pointing, Pediment, and Misc	30 00	
Repair Brick Floor	70 00	
		100 00
[fol. 3579] Scrubber House "H":		
Repair Front Door	$12 00	
3 Lights	3 00	
		15 00
Generator House "A-1—D-1":		
Repair Sash	120 00	
Replace 2 Pairs of Sash	60 00	
		180 00

		Expenditures, total
Coal Shed "K-W-W-1":		
Replace 5 sheets of Corr. Galv. Iron	40 00	40 00
Boiler & Oxide House "B-2":		
Point Brickwork	100 00	
7 Lights of Glass	7 00	
2 Lights of Glass	8 00	115 00
Fire Brick Storage Shed "B-2":		
17 Pieces of Corr. G. I. Siding	34 00	34 00
Purifier House "P":		
Point Brickwork	300 00	
11 Lights	11 00	311 00
[fol. 3580] Purifier "O":		
Repair Floor	$260 00	250 00
Engine & Blower House "C":		
3 Skylight Lights	6 00	6 00
Tar Separator Pump House "E" & Oil House:		
New Roof Boards	35 00	
Repair Sash & Stops	22 00	
Patch Holes in Brickwork	10 00	
Whitewash Rafters	10 00	77 00
Boiler House "B":		
Repair Brickwork	200 00	
Repair Floor	70 00	270 00
Blacksmith & Paint Shop "U":		
Repair Asbestos Slate	30 00	
Point Brickwork	20 00	50 00

		Expenditures, total
Stable "T":		
Repair Gate of Shed	20 00	
		20 00
[fol. 3581] Oil Storage "R":		
Point Brickwork	$30 00	
New Iron Shutters	38 00	
		68 00
Stove Storage "Y" (Toluol Bldg.):		
Repair Door	10 00	
Repair Concrete Lintel	25 00	
		35 00
Grand Total		$2,923 00
[fol. 3582] Storage Building "X-1" (Toluol):		
Exterior Painting	$300 00	
Misc. Woodwork Repairs	80 00	
Roof Repairs	100 00	
		480 00
Storage "X-2":		
Exterior Paint	70 00	
Brickwork Pointing	20 00	
Door & Transom	20 00	
Sash Repairs	45 00	
		155 00
Horse Hospital "Za":		
Exterior Paint	70 00	
Repair Gutter	10 00	
		80 00
Shed "V-2":		
Roof & Skylight Repairs	600 00	
Brickwork Repairs	300 00	
Repair Door	70 00	
Glazing	40 00	
		1,010 00

		Expenditures, total
[fol. 3583] Shed "V-3":		
Repair Brickwork	$100 00	
Repair Door	70 00	
Roof Repairs	100 00	
		270 00
Shed "V-4":		
Repair Brickwork	200 00	
Repair Door	90 00	
Roof Repairs	120 00	
		410 00
Shed "V-5":		
Repair Brickwork	45 00	
Repair Doors	180 00	
Repair Roof	80 00	
		710 00
Shed "V-6":		
Repair Brickwork	400 00	
Repair Door	30 00	
Repair Paving	200 00	
Repair Wood Floors	300 00	
Repair Roof & Coping	90 00	
		1,020 00
Purifier "U":		
Repair Brickwork	320 00	
Sash & Glass	120 00	
Exterior Paint	200 00	
Slate Roof Repairs	100 00	
		740 00
Purifier & Scrubber "T":		
Repair Brickwork	200 00	
Sash & Glass	200 00	
Exterior Paint	350 00	
Doors	70 00	
		820 00
[fol. 3584] Purifier "S":		
Repair Brickwork	$60 00	
Repair Doors	80 00	
		140 00

		Expenditures, total
Purifier "R":		
Repair Brickwork	100 00	
Sash & Glass	230 00	
Exterior Paint	300 00	
Repair Door	120 00	
		750 00
Meter House "C":		
Exterior Paint	360 00	
Roof	1,100 00	
		1,460 00
Meter Shop "A-A":		
Sash, Doors & Glass	1,400 00	
Brick Pointing	200 00	
Metal Awning (Marquise)	900 00	
Repair Stairs	300 00	
Ext. & Interior Painting	1,200 00	
Composition Floors Repair	250 00	
New Wood Floors	900 00	
Fire Escape Repairs	150 00	
Repair Loading Platform	60 00	
Rebuild Chimney Tops	200 00	
New Roof	600 00	
Repair Area Gratings	140 00	
Repair Window Guards	150 00	
		6,450 00
[fol. 3585] Exhauster & Engine "W":		
Sash, Doors & Glass	$300 00	
Paint Exterior Cornice	200 00	
		500 00
Stable "Z":		
Exterior Paint	650 00	
Sash, Doors & Glass	600 00	
Re-paint Brick	800 00	
Repair Runways	1,000 00	
Repair Roofs	700 00	
Wood Floors	1,200 00	
		4,950 00

		Expenditures, total
Blacksmith Shop & Sheds, Rear of Stable:		
Overhaul	3,500 00	3,500 00
Water Meter House (At "B" Garage):		
Overhaul	40 00	40 00
Garage "B":		
Brick Pointing	80 00	
Sash & Glass	200 00	
		280 00
[fol. 3586] **Garage "A":**		
Sash & Glass	140 00	
Repair Brickwork	130 00	
Exterior Paint	250 00	
Repair Floors	120 00	
		640 00
Garage "C":		
Sash & Glass	30 00	
Roof	100 00	
Woodwork	70 00	
		200 00
Acetylene House "F-2":		
Overhaul	150 00	150 00
Valves "D":		
Miscellaneous Woodwork & Glass	90 00	90 00
"E" Valves:		
Miscellaneous Repairs	40 00	40 00
"F" Valves:		
Repair Brickwork	25 00	25 00
Riggers' Storage "G":		
Repair Woodwork	275 00	
Sash, Doors & Glass	210 00	
		485 00

[fol. 3587] Office "K":		Expenditures, total
New Wood Saddle	3 00	
Renovate Stonework	150 00	
Re-paint Cornice	60 00	
Interior Paint	250 00	
Repair 3rd Floor, Top Finish	475 00	
		938 00
Generator House:		
Point Stonework	300 00	
Re-cut Water Table	350 00	
Repair Quoins	164 00	
Repair & Repoint Brickwork	600 00	
Misc. Woodwork & Sash	800 00	
Roof Repairs	5,973 00	
Skylight	200 00	
Paint Steel Trusses & Purlins	300 00	
		8,687 00
Smith Shop "H-1":		
New Floor	900 00	
New Ceiling	1,300 00	
		2,200 00
Boilers "H-B":		
New Roof	4,513 00	
Paint Steel Trusses & Purlins	470 00	
Pavement Repairs	1,200 00	
		6,183 00
[fol. 3588] Retorts & Workshop "H-S":		
Roof	4,509 00	
Paint Trusses	500 00	
		5,009 00
Pumps "N":		
Sash, Frames & Doors	220 00	220 00
Water Tower "M":		
Paint & Repair Sash & Frames	300 00	300 00

Condensers "H-C" & Tank House "A-G":

		Expenditures, total
Paint Steel Trusses	560.00	
New Roof	5,728.00	
Point & Repair Brickwork	1,800.00	
Repair Gutter	74.00	
Sash & Glass	480.00	
Repair Louvres	100.00	
		8,742.00
Coal Shed "V-1":		
Repair Brickwork	370.00	
Slate Roof	700.00	
Misc. Woodwork	200.00	
		1,270.00
Weighing Hopper:		
Overhaul	75.00	75.00
[fol. 3589] Dump "D-d":		
Overhaul	475.00	475.00
Fences & Walls:		
Repaint	800.00	
Repair Concrete Coping	300.00	
Repair Gates	550.00	
General Repairs	1,500.00	
		3,150.00
Grand Total (8 Sheets, #1-8)		$62,644.00

[fol. 3590] 99th Street Works

Office—"C":		
Repair Sash	$20.00	
13 lights of glass	13.00	
Replace shutters	19.00	
8 Treads	12.00	
		64.00

Meter House—"D":		total Expenditures.
Repair sash	40.00	
Point brickwork	25.00	
Cellar floor	40.00	
Repairs to C. I. Gutter	60.00	
Repair slate roof	40.00	
		205.00
Purifier and Oxide—"E":		
Point brickwork	50.00	
Repair C. I. Gutter	250.00	
3 lights of glass	3.00	
Repair Slate Roof	40.00	
10 Treads	15.00	
		358.00
Condenser and Scrubbers—"K":		
Point brickwork	20.00	
Repair roof	20.00	
3 lights of glass	3.00	
		43.00
Exhauster—"L":		
Wood Saddle	2.00	
4 lights of glass	4.00	
6 Treads	9.00	
1 Post on stoop	6.00	
		21.00
[fol. 3591] **Engine Room—"A":**		
Repair C. I. Gutter	250.00	
2 lights wire glass	12.00	
9 Treads	14.00	
Repair Sash	80.00	
		356.00
Retort and Boiler House—"A-1":		
Repair Slate Roof	800.00	
Point brickwork	200.00	
Repair Sash	160.00	
12 lights of glass	12.00	
Repair C. I. Gutter	400.00	
Repair Louvres	220.00	
		1,792.00

		Expenditures, total
Coal Shed—"S":		
Point brickwork	40 00	40 00
Generator House—"A-2"		
Repair brickwork	120 00	
Repair louvres	150 00	270 00
Grand Total		$3,149 00

[fol. 3592] Kingsbridge Station

Governor House: None.

[fol. 3593] West 132nd Street

Governor House:		
Point crack, north side	$10 00	
8 lights of clear glass	8 00	
1 light wire glass	4 00	
Patch plaster	15 00	37 00
Boiler House:		
Repair brick floor	30 00	
Rehang monitor sash	2 00	
3 lights wire glass	12 00	
5 lights clear glass	5 00	49 00
Fence:		
Plumb fence and repair two (2) top rails	40.00	40 00
Curb:		
Repair curb in yard	24 00	24 00
Grand Total		$150 00

[fol. 3594] West 131st Street

Emergency Station:		Expenditures, total
Paint Sash		$74.00
Repair front door		4.00
Repair Brickwork		10.00
Grand Total		$88.00

[fol. 3595] 111th Street Station

Wagon Shed—"V":		
Repair doors and windows	$60.00	$60.00
Stable—"S":		
New floor	180.00	
Painting	75.00	
Repair sash and frames	120.00	375.00
Exhauster House—"B":		
Repaint exterior	70.00	
Repair basement door jambs	24.00	
4 lights of glass	4.00	98.00
Boiler House—"C":		
Repair front door	60.00	60.00
Shed (Est. 12):		
General Repairs	30.00	30.00
Emergency Wagon House—"D":		
9 lights of wire glass	18.00	
Repair door	6.00	
New window sill and door stop	3.00	
Patch brickwork	20.00	47.00
Office—"E":		
Point brickwork	30.00	30.00

[fol. 3596]			Expenditures, total
Stable and Garage—"N":			
Repair concrete floor		$80 00	$80 00
Portable Steel Garage—"M-1":			
1 light of glass		1 00	1 00
Weigh House—"H":			
Re-putty sash		10 00	
2 lights of glass		2 00	
Straighten Galv. Iron		10 00	22 00
Coke Loading Shanty:			
Repaint		25 00	
1 light of glass		1 00	26 00
Coke Screen—"P":			
11 lights of glass		11 00	
Repair gutters and leaders		221 00	232 00
Portable Tool House:			
Repaint		25 00	25 00
Grand Total			$1,086 00

[fol. 3597] West 65th Street Station

Meter Shop:		
Repair Sash and Glass	$150 00	
Repair Brickwork	80 00	
Exterior Painting	100 00	
Wood Floor	1,880 00	$2,210 00
Garage—"F":		
Sash, Glass and Paint	40 00	
Repaid G. I.	50 00	90 00

		Expenditures, total
Engine and Valve House:		
3 large lights of glass	15 00	
2 small lights of glass	2 00	
General repairs to brickwork	100 00	
		117 00
Boiler House:		
Repair doors, sash and glass	50 00	
		50 00
Emergency Wagon House:		
Straighten 7 sheets of G. I.	14 00	
3 lights of glass	3 00	
Paint gutter and leaders	15 00	
		32 00
[fol. 3598] **Office—"R":**		
2 lights of wire glass	12 00	
8 lights of plain glass	8 00	
Patch plaster and paint interior	170 00	
		190 00
Scale House:		
General repairs to woodwork	200 00	
Repaint	65 00	
		265 00
Blacksmith Shop:		
New door	41 00	
Repaint	33 00	
		74 00
Pipe Rack—"L":		
Paint	75 00	
		75 00
Grand Total		$3,103 00

[fol. 3599] **East 63rd Street Station**

Fences & Walls:	
Point Brickwork	$400 00
Repair Gates	60 00
Repair Water Table	90 00
Grand Total	$550 00

[fol. 3600] 44th Street Station

		Expenditures, total
Storage Shed—"B":		
Point brickwork	$40 00	
Putty Sash	30 00	
Paint Exterior	40 00	
Replace Slate	20 00	
7 lights of glass	7 00	
		$137 00
Valve House—"A":		
Paint interior	120 00	
Stone door sill	16 00	
5 lights of glass	5 00	
Paint cupola	15 00	
		156 00
Boiler and Engine Room:		
Repair door	20 00	
Repair slats of blinds	40 00	
		60 00
Fences:		
Point brick fence and wall	250 00	
Renovate gate	20 00	
		270 00
Grand Total		$623 00

[fol. 3601] 17th Street Yard

Engine House (Derrick Shed):		
Renew Galv. Iron	$120 00	
2 Lights	8 00	
Repaint	20 00	
		$148 00
Store House & Shed:		
New Gutter	80 00	
Ten New Sheets G. I.	20 00	
Repaint Wire Guards over Skylight	10 00	
		110 00
Grand Total		$258 00

[fol. 3602] 15th Street Holder Station

		Expenditures, total
Exhauster House:		
Repair Slate Roof	$610 00	
Point Brickwork	80 00	
Repair Stiles, Front Door	20 00	
Exterior Paint	45 00	
Interior Paint	310 00	
		$1,065 00
Oil House:		
Point Brickwork	15 00	
		15 00
Boiler House:		
Exterior Paint	50 00	
Glazing	56 00	
Repair Door & Windows	30 00	
Brickwork, Pointing & Repairing	120 00	
		256 00
Grand Total		$1,336 00

[fol. 3603] General Office Building

General Office Building:	
Exterior Painting	$4,500 00
Interior Painting	6,000 00
Repair Tile & Terrazzo	5,700 00
New Marble Treads and Brass Saddles	3,500 00
Repair Stair Rails	1,200 00
Repair Concrete Floor	400 00
Reset & Reline 1 Boiler	3,500 00
Plaster Repairs	2,500 00
Grand Total	$27,300 00

[fol. 3604] General Office Building Annex

General Office Building Annex:	Expenditures, total
Patch & Point Limestone Ashlar	$60.00
Plaster Repairs	400.00
Painting & Glazing	200.00
Grand Total	$660.00

[fol. 3605] West 159th Street Shop

West 159th Street Shop:	
Patch holes in brickwork	$20.00
Repair cement floor	30.00
Repair door and hardware	7.00
Replace 22 wooden treads	22.00
Repair composition floor	8.00
1 light of skylight glass	2.00
2 sections of T. C. Coping	2.00
Replace wood top floor	410.00
Replace wood 3rd floor	215.00
Replace wood 1st floor	135.00
Grand Total	$851.00

[fol. 3606] Branch Office, West 57th St.

West 57th Street:	
Replace wood floor of sidewalk Elevator	15.00
Replace four (4) bronze door knobs	4.00
Tighten handrail of stairs	80.00
Replace broken slate and floor tile	15.00
Grand Total	$114.00

[fol. 3607] 2084 Third Avenue

2084 Third Avenue:	Expenditures, total
New stone sill	$24 00
Repaint	180 00
Patch Plaster	40 00
2 lights clear glass	2 00
Grand Total	$246 00

[fol. 3608] 175 East 114th Street

175 East 114th Street:

Repair floor	$30 00
Replace 28 wood treads	56 00
3 new saddles	6 00
3 lights of glass	6 00
Repair concrete floor	20 00
Repair vault lights	40 00
Grand Total	$158 00

[fol. 3609] Hester Street

Office—"A":		
1 light of glass	$3 00	
1 light of wire glass	4 00	
Patch plaster	180 00	
18 wood treads	27 00	
Repaint plaster walls	160 00	
		374 00
Office and Meter Shop—"B":		
1 light of polished wire glass	8 00	
1 light of wire glass	2 00	
Repair wire screen	8 00	
Repair sheet iron shutters	20 00	
		38 00
Stove Shop—"D":		
New wood floor	125 00	
		125 00
Grand Total		$537 00

[fol. 3610] Stipulation re Plaintiff's Exhibit No. 840

United States District Court Southern District of New York

In Equity. No. 26-366

Consolidated Gas Company of New York, Plaintiff,

against

Albert Ottinger, as Attorney General of the State of New York, Defendant

Stipulation as to Plaintiff's Exhibit No. 840

It is stipulated and agreed that Plaintiff's Exhibit No. 840, consisting of 9 pages, which is endorsed "Standard Gas Light Company Inventory & Reproduction Costs of Structures & Appurtenances as of June 1, 1923," be not printed in full, but that there be printed the following page, which contains a summary of the detail costs: Page entitled "Standard Gas Light Company, 63rd Street & East River, General Summary of Costs upon a Subcontract Basis as of June 1, 1923."

It is further stipulated and agreed by the defendant Attorney General and appellant, but only for the purposes of this appeal:

(a) That the structures and appurtenances set forth in Plaintiff's Exhibit No. 840 were in existence on June 1, 1923;

[fol. 3611] (b) That the structures and appurtenances set forth in Plaintiff's Exhibit No. 840 were used and useful in the business of the Standard Gas Light Company and/or plaintiff and appellee on June 1, 1923;

(c) That the quantities, units, unit prices and total cost contained in Plaintiff's Exhibit No. 840 are a correct estimate of the cost to reproduce as of June 1, 1923, each and every item contained in said exhibit on a subcontract basis as the same is described in the testimony of Henry Burt, upon the trial. It is understood, however, that the appellant does not, by so stipulating, concede that the sub-contractor's profit is properly included in such an estimate of the cost to reproduce, or that the figure for field over-

head should be included or is in the proper amount. Appellant reserves the right to contest on this appeal the propriety and amount of both field overhead and subcontractor's profit.

Dated New York, April 27, 1926.

Shearman & Sterling, Solicitor for Plaintiff and Appellee. John Holley Clark, Jr., Solicitor for Defendant Attorney General and Appellant.

[fol. 3612] Standard Gas Light Company, 63rd Street & East River

General Summary of Costs upon a Sub-Contract Basis as of June 1, 1923

	Total cost	Pages
Boiler & Governor House	$67,898.88	1–2
Coal Storage Fence	1,475.17	3
Fences around Holder #s 1 & 2	5,794.49	4
Grand total	$75,168.54	

Note.—No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

Note.—The above totals include the amounts applied to the total costs of the respective structures, for Field Overhead varying from 5-8% and for Building Contractor's Profit of 10% as described in testimony of Henry R. Burt.

[fol. 3613] STIPULATION RE PLAINTIFF'S EXHIBIT No. 841

UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

In Equity. No. 26-366

CONSOLIDATED GAS COMPANY OF NEW YORK, Plaintiff,

against

ALBERT OTTINGER, as Attorney-General of the State of New York, Defendant

Stipulation as to Plaintiff's Exhibit No. 841

It is stipulated and agreed that Plaintiff's Exhibit No. 841, consisting of 13 pages, which is endorsed "East River Gas Company Inventory & Reproduction Costs Structures & Appurtenances as of June 1, 1923," be not printed in full, but that there be printed the following pages, which contain summaries of the detail costs:

Page entitled "East River Gas Company, General Summary";

Pages setting forth "General Summary of Costs upon a Subcontract Basis as of June 1, 1923," of the structures and appurtenances, respectively, at the several locations mentioned in the General Summary of Costs.

It is further stipulated and agreed by the defendant Attorney General and appellant, but only for the purposes of this appeal:

[fol. 3614] (a) That the structures and appurtenances set forth in Plaintiff's Exhibit No. 841 were in existence on June 1, 1923;

(b) That the structures and appurtenances set forth in Plaintiff's Exhibit No. 841 were used and useful in the business of the East River Gas Company of Long Island City and/or plaintiff and appellee on June 1, 1923;

(c) That the quantities, units, unit prices and total cost contained in Plaintiff's Exhibit No. 841 are a correct estimate of the cost to reproduce as of June 1, 1923, each and every item contained in said exhibit on a subcontract basis as the same is described in the testimony of Henry Burt,

upon the trial. It is understood, however, that the appellant does not, by so stipulating, concede that the sub-contractor's profit is properly included in such an estimate of the cost to reproduce, or that the figure for field overhead should be included or is in the proper amount. Appellant reserves the right to contest on this appeal the propriety and amount of both field overhead and subcontractor's profit.

Dated New York, April 27, 1926.

Shearman & Sterling, Solicitors for Plaintiff and Appellee. John Holley Clark, Jr., Solicitor for Defendant Attorney General and Appellant.

[fol. 3615] East River Gas Company

General Summary

Structure	Total cost
Head House—E. 132nd Street	$39,164.87
Head House—71st Street & East River	26,573.17
Storage Shed—71st Street & East River	701.38
Head House—Ravenswood, L. I	33,385.52
Head House—Astoria, L. I	92,654.61
Grand total	$192,479.55

Note.—The above totals include the amounts applied to the total costs of the respective structures, for Field Overhead varying from 5-8% and for Building Contractor's Profit of 10% as described in testimony of Henry R. Burt.

[fol. 3616] East River Gas Company East 132nd Street

General Summary of Costs upon a Sub-Contract Basis as of June 1, 1923

Structure:	Total cost	Pages
Head House	$39,164.87	1

Note.—No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

[fol. 3617] East River Gas Company, 71st Street & East River

General Summary of Costs upon a Sub-Contract Basis as of June 1, 1923

Structures:	Total cost	Pages
Head House	$26,573.17	1–2
Storage Shed	701.38	3
Grand total	$27,274.55	

Note.—No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

[fol. 3618] East River Gas Company, Ravenswood, Long Island

General Summary of Costs upon a Sub-Contract Basis as of June 1, 1923

Structure:	Total cost	Pages
Head House	$33,385.52	1–2

Note.—No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

[fol. 3619] East River Gas Company, Astoria, Long Island

General Summary of Costs upon a Sub-Contract Basis as of June 1, 1923

Structure:	Total cost	Pages
Head House	$92,654.61	1–2

Note.—No allowance made in the above for General Contractor's Expense and Profit, Administrative, Interest and Taxes, or other undistributed costs during construction.

[fol. 3619a] PLAINTIFF'S EXHIBIT No. 842

Standard Gas Light Company

Expenditures, etc.

[fol. 3620] Standard Gas Light Company East 63rd Street Station

Expenditures necessary to put the building of the Standard Gas Light Company in the condition in which they were when new

Boiler & Exhauster House:

Repairs Doors & Glass	$90 00
General Brickwork Repairs	160 00
Grand Total	$250 00

[fol. 3620a] PLAINTIFF'S EXHIBIT No. 843

East River Gas Company

Expenditures, etc.

[fol. 3621] East River Gas Company

Expenditures necessary to put the buildings of the East River Gas Company in the condition in which they were when new

Summary

Location	Expenditures
Head House at Bronx	.....
Head House at 71st Street	.....
Head House at Ravenswood, L. I.:	
Renew Corr. G. I $40 00	
Repair Woodwork 70 00	
	$110 00

Location		Expenditures
Head House at Astoria, L. I.:		
Door, Sash & Glass	50 00	
		50 00
Grand Total		$160 00

(Here follow Plaintiff's Exhibits Nos. 850, 851, 852, and 853, marked side folio pages 3622, 3623, 3624, and 3625).

[fol. 3626] PLAINTIFF'S EXHIBIT No. 854

Reproduction Cost of Labor and Material Necessary for the Laying of the Transfer Mains of the Consolidated Gas Co. of New York, as of June 1st, 1923

	Quantity in feet	Labor per foot	Material per foot	Total	Reproduction cost June 1st, 1923
Manhattan:					
48"	29,725.16	$20.102	$32.007	$52.109	$1,554,204.15
30"	85,854.33	11.399	13.991	25.351	2,176,493.12
20"	21,285.00	6.720	7.622	14.342	305,269.47
Bronx:					
48"	41,212.42	19.367	29.668	49.035	2,020,851.01
30"	1,209.00	10.755	12.929	23.684	28,633.96
Total					$6,085,451.71
36" Harlem River Main					103,634.50
Plus Reproduction Cost of Pavement paid for by Company over Mains at least					241,683.67
Plus 4.185% on $2,542,458.02 for Employees and Public Liability Insurance on Labor					106,401.89
Plus Pavement Inspection and Permits (Manhattan only)					11,200.48
Plus City Inspection (Manhattan and Bronx)					9,000.00
Grand Total					$6,617,372.25

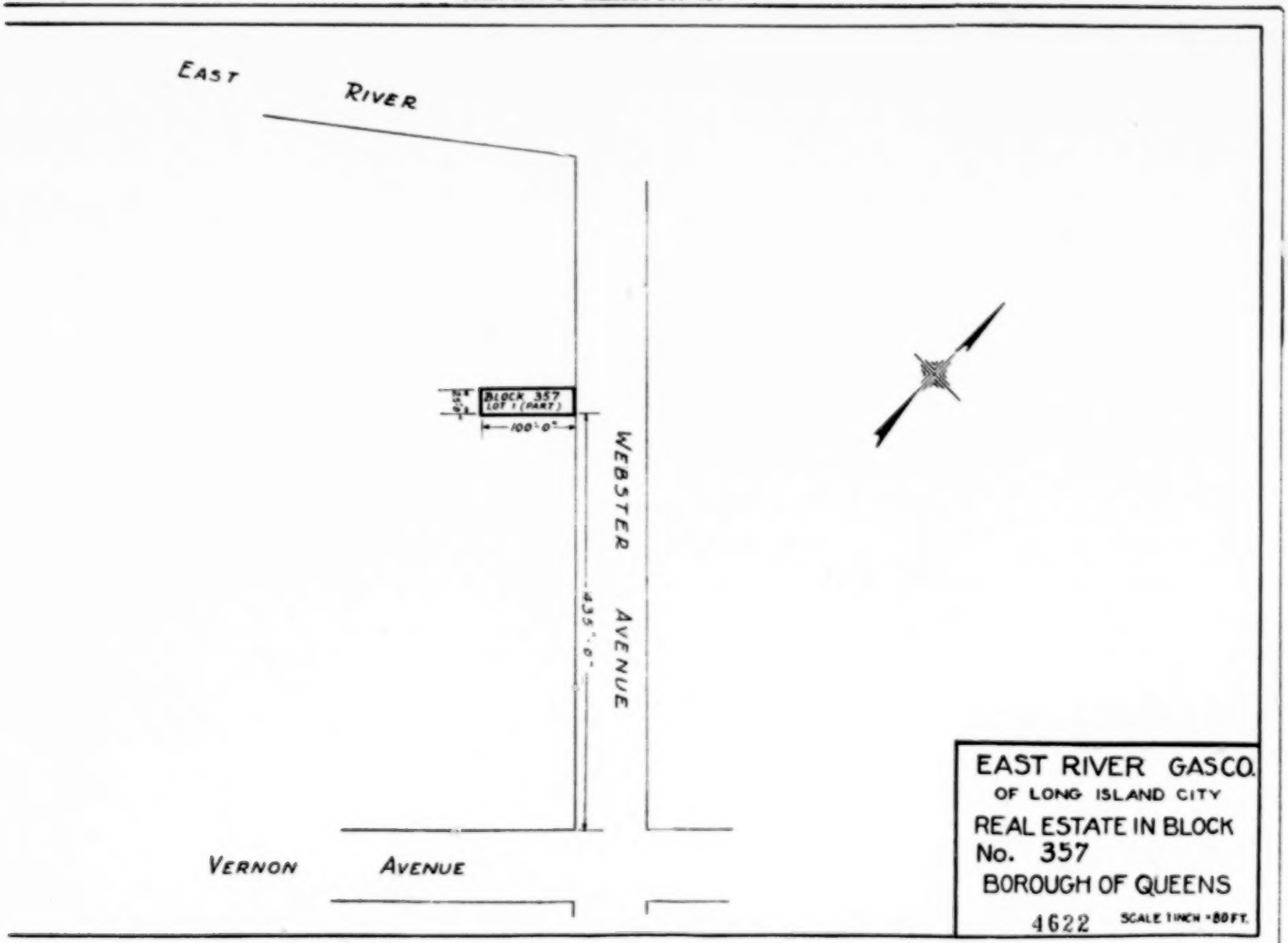
NOTE.—The foregoing is exclusive of necessary charges for engineering, superintendence and contractor's profit, administrative, legal, engineering and miscellaneous general expense during construction, interest during construction on mains, and other undistributed structural costs.

NOTE.—Reproduction Cost of labor and material necessary for the laying of that portion of the Transfer Mains of the Consolidated Gas Company, set forth above, as of June 1, 1923, included in Woods' report, including reproduction cost of pavement paid for by Company over mains, pavement inspection and permits and city inspection, and employees and public liability insurance on labor.

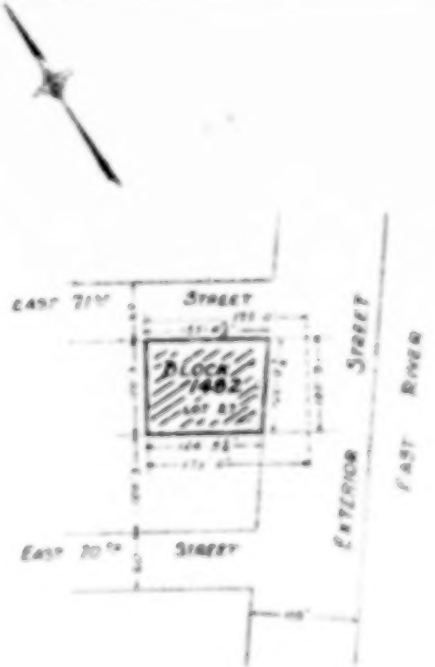
56,264 feet of 48" C. I. Mains $3,027,778.00

(Here follows Plaintiff's Exhibit 855, marked side folio page 3627)

PLAINTIFF'S EXHIBIT NO. 850



PLAINTIFF'S EXHIBIT NO 851

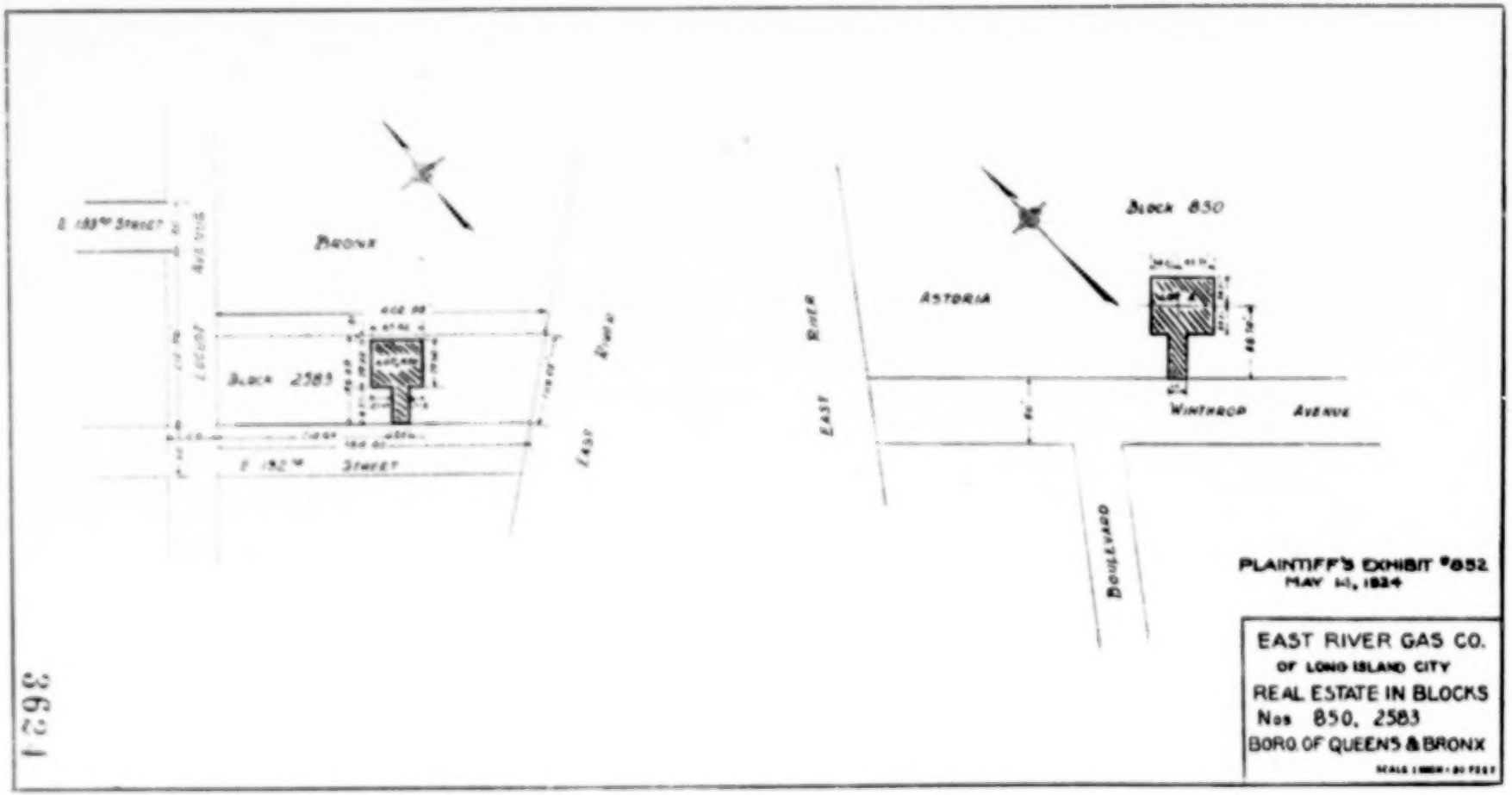


PLAINTIFF'S EXHIBIT "851
MAY 14, 1934

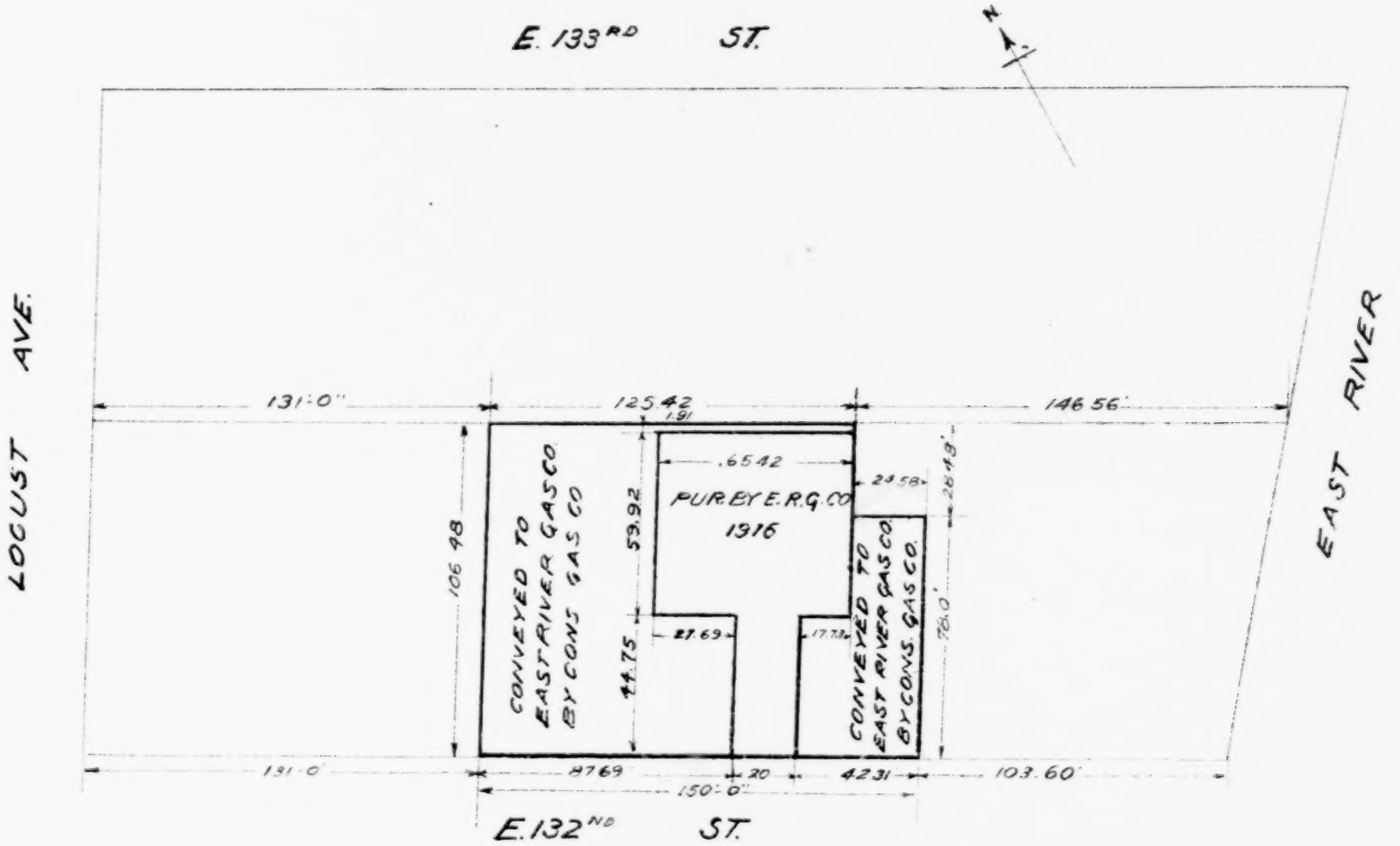
EAST RIVER GAS CO.
OF LONG ISLAND CITY
REAL ESTATE IN BLOCK
No. 1482
BOROUGH OF MANHATTAN

3623

PLAINTIFF'S EXHIBIT NO. 852



3621



BLOCK 2583 – LOT 450

PLAINTIFF'S EXHIBIT *853
MAY 14, 1924

[fol. 3627] PLAINTIFF'S EXHIBIT No. 855

Reproduction Cost of Labor and Material Necessary for the Laying of the Transfer Mains of the Standard Gas Light Company of the City of New York, the New Amsterdam Gas Company (Including the East River Gas Company of Long Island City), and the Northern Union Gas Company, Including Pavement Over Mains Paid for by these Companies.

Properties included in Woods' report					Properties not included in Woods' report				
Property	Size of main	Quantity in feet	Owned by	Reproduction cost June 1, 1923	Property	Size of main	Quantity in feet	Owned by	Reproduction cost June 1, 1923
Astoria Tunnel C. I.	72″	10,313			C. I. Mains	36″	12,368	Standard	$464,285.00
Mains & Connections	48″	371	New Amsterdam	$1,121,741.00	C. I. Mains	30″	2,847	Standard	77,042.00
Ravenswood Tunnel C. I.	36″	6,055			C. I. Mains	30″	2,787	North. Union	63,964.00
Mains & Connections	30″	59	New Amsterdam	195,145.00	C. I. Mains	24″	9,028	New Amsterdam	183,097.00
C. I. River Main	48″	792	Standard	337,832.00	C. I. Mains	24″	30,088	Standard	607,154.00
Steel Main	60″	14,965			C. I. Mains	20″	12,469	New Amsterdam	185,063.00
C. I. Main	48″	4,473	New Amsterdam	1,064,464.00					
			Total	$2,719,182.00				Total	$1,580,605.00

Summary

	Included in Woods' report	Not included in Woods' report	Total
New Amsterdam Gas Company	$2,381,350.00	$368,160.00	$2,749,510.00
Standard G. L. Co. of the City of N. Y.	337,832.00	1,148,481.00	1,486,313.00
Northern Union Gas Company		63,964.00	63,964.00
Grand total	$2,719,182.00	$1,580,605.00	$4,299,787.00

NOTE.—The foregoing is exclusive of necessary charges for engineering, superintendence and contractor's profit, administrative, legal, engineering and miscellaneous general expense during construction, interest during constructon on mains, and other undistributed structural costs.

[fol. 3628] UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

In Equity. No. 26-366

CONSOLIDATED GAS COMPANY OF NEW YORK, Plaintiff,

against

ALBERT OTTINGER, as Attorney-General of the State of New York, Defendant

STIPULATION AS TO PLAINTIFF'S EXHIBITS Nos. 856, 856a

It is stipulated and agreed that Plaintiff's Exhibits Nos. 856 and 856a, consisting of 330 pages, which are entitled "Inventory and Appraisal of the Property of the Consolidated Gas Company of New York Used in Its Gas Business as of June 1st, 1923," be not printed in full, but that there be printed in lieu thereof, the following pages:

Page 1—entitled "Consolidated Gas Co.—Index."

Pages 2 and 2a—entitled "Value of the Property of the Consolidated Gas Company of New York used in its Gas Business as of June 1st, 1923" containing grand summaries.

Pages 3 to 8—entitled "Notes regarding Certain Necessary Elements of Cost in Reproducing the Property of the Company."

Page 9—entitled "Consolidated Gas Co.—General Summary of Costs," of manufacturing stations, holder stations, and miscellaneous locations.

Pages 11, 68, 95, 106, 110, 181, 215, 225, 230, 244, 282, 297, 309, 312, 326, 327, 328, 329 and 330, containing summaries of costs of the respective manufacturing stations, holder stations, and miscellaneous locations.

[fol. 3629] There shall be also printed the pages forming part of Plaintiff's Exhibits Nos. 856 and 856a, which relate to the 14th Street station and the 42nd Street station, as setting forth the detail costs of the apparatus and foundations at those stations, and as specimen pages of the detail inventory of the manufacturing plants, holders, holder stations and miscellaneous locations set forth in Plaintiff's Exhibits Nos. 856 and 856a.

It is further stipulated and agreed by the defendant Attorney General and appellant, but only for the purposes of this appeal:

(a) That all the apparatus, foundations and miscellaneous physical properties set forth in Plaintiff's Exhibits Nos. 856 and 856a were in existence on June 1, 1923;

(b) That all the apparatus, foundations and miscellaneous physical properties set forth in Plaintiff's Exhibits Nos. 856 and 856a, except those described as being at the 14th Street station and the 42nd Street station, were used and useful in the business of the plaintiff and appellee on June 1, 1923; provided, however, appellant does not by so stipulating withdraw his assignments of error Nos. 5, 7, 10, 13, 24, 26, 39, 41 or any other assignments of error in which the same or similar questions are raised, or waive his right to present brief and argue questions of law and fact contained in such assignments of error;

(c) That the quantities, units, unit prices and total cost contained in Plaintiff's Exhibits Nos. 856 and 856a are a correct estimate of the cost to reproduce as of June 1, 1923, each and every item on a labor, material and subcontract basis as the same is described in the testimony of Alten S. [fol. 3630] Miller, upon the trial; provided, however, that this stipulation does not apply to any figures contained on pages 2 and 2a, grand summary, entitled "Value of the Property of the Consolidated Gas Company of New York used in its Gas Business as of June 1, 1923," in so far as they relate to the items of land, street mains, and services, or in so far as they appear in any other exhibits which are printed in this record in full, and that appellant does not concede that the elements set forth in pages 3, 4, 5, 6, 7, and 8, entitled "Notes Regarding Certain Necessary Elements of Cost in Reproducing the Property of the Company," are properly included in such an estimate of the cost to reproduce or are in the proper amount, but as to which elements appellant reserves the right to contest upon this appeal the propriety and amount of any or all thereof.

Dated New York, April 27, 1926.

Shearman & Sterling, Solicitors for Plaintiff and Appellee. John Holley Clarke, Jr., Solicitor for Defendant Attorney-General and Appellant.

[fol. 3631] PLAINTIFF'S EXHIBIT NO. 856 AND 856A

Consolidated Gas Co.

Index

	Page
Value of The Property of The Consolidated Gas Co. as of June	2
Notes Regarding Certain Necessary Elements of Cost in Reproducing The Property of the Company	3-8 Inclusive
General Summary of Costs	9

Manufacturing Stations

11th Street Station	10-66 Inclusive
14th Street Station	67-93 "
21th Street Station	108-179 "
42nd Street Station	180-213 "
99th Street Station	243-280 "

Holder Stations and Miscellaneous Locations

15th Street Holder Station	94-104 Inclusive
17th Street Holder Station	105-107 "
44th Street Holder Station	214-223 "
63rd Street Holder Station	224-228 "
65th Street Holder Station	229-242 "
111th Street Holder Station	281-295 "
132nd Street Holder Station	296-307 "
159th Street Shop	308-310 "
Kingsbridge Holder Station	311-323 "

General

Meters, Cocks, etc	324-326 Inclusive
General Equipment	329 "
Tools and Implements	328 "
Gas Appliances	327 "
Laboratory Equipment	330 "

[fol. 3632] Value of the Property of the Consolidated Gas Company of New York Used in its Gas Business as of June 1st, 1923

Land as appraised by Mr. Robert Huntley (G110)	$13,959,150
Buildings as appraised by Mr. Henry R. Burt (221)	8,937,610
Manufacturing Plants and Holders (Other than land and buildings) (G121, G122a, G122c, 221, G141a, 222, G141b, G143b, G145, G143a, 224, 225, 238)	11,767,353
Holder Stations and Miscellaneous Locations (Other than land and buildings) (G121, G122a, G122c, 221, G141a, 222, G141b, G143b G145, G143a, 224, 225, 238)	6,431,252
Street Mains as appraised by Mr. Colin C. Simpson (231)	37,075,233
Services as appraised by Mr. Colin C. Simpson (232)	5,557,284
Meters, Cocks, etc. (233 and 234)	6,914,245
Gas Appliances (236, 239)	6,163,245
General Equipment, including office and stable equipment, and scows, as shown on the books of the Company (G122a, G122d)	831,523
Tools and Implements, as shown on the books of the Company (237)	202,363
Laboratory Equipment, as shown on the books of the Company (238)	23,905
Omissions and Contingencies	909,930
Organization and Development prior to Construction (101 and G102)	6,600,000
Cost of Financing	6,900,000
Engineering, Superintendence and General Contractor's Expense and profit (G281)	8,465,779
Interest during Construction (G285)	9,323,611
Taxes during Construction (G284)	851,089
Administrative, Legal and Misc. General Expense during Construction (G282, G283 and G286)	1,839,679
Working Capital (1, G10, 3, 5, 313, 321, 322, 323, 324, 332)	6,900,000
	$139,653,251

Franchises and Rights (G102) (212 U. S. 219; 267 Fed. 231; Affirmed 258 U. S. 165)	7,781,000
Total	$147,434,251

No allowance has been made in the above for going value, and no allowance, other than the sum of $7,781,000 has been made for franchises, easements, or any other property not specifically mentioned.

[fol. 3633] PLAINTIFF'S EXHIBIT No. 856-A

Value of the Property of the Consolidated Gas Company of New York Used in Its Gas Business as of June 1st, 1923

Land as appraised by Mr. F. K. Stevens, except Block 982, Lot 10—Block 988, Lot 1—Block 991, Lot 1—Block 991, Lot 47—Block 1089, Lot 1—Block 1107, Lot 7—appraised by Mr. Robert Huntley (G110)	$13,608,125
Buildings as appraised by Mr. Henry R. Burt (221)	8,937,610
Manufacturing Plants and Holders (Other than Land and Buildings) (G121, G122a, G122c, 221, G141a, 222, G141b, G143b, G145, G143a, 224, 225, 238)	11,767,353
Holder Stations and Miscellaneous Locations (Other than Land and Buildings) (G121, G122a, G122c, 221, G141a, 222, G141b, G143b, G145, G143a, 224, 225, 238)	6,431,252
Street Mains as appraised by Mr. Colin C. Simpson (231)	37,075,233
Services as appraised by Mr. Colin C. Simpson (232)	5,557,284
Meters, Cocks, etc. (233, 234)	6,914,245
Gas Appliances (236, 239)	6,163,245
General Equipment, including Office and Stable Equipment, and Scows, as shown on the books of the Company (G122a, G122d)	831,523
Tools and Implements, as shown on the books of the Company (237)	202,363
Laboratory Equipment, as shown on the books of the Company (238)	23,905

Omissions and Contingencies	909,930
Organization and Development prior to Construction (101, G102)	6,600,000
Cost of Financing	6,900,000
Engineering, Superintendence and General Contractor's Expense and Profit (G281)	8,465,779
Interest during Construction (G285)	9,267,447
Taxes during Construction (G284)	851,089
Administrative, Legal and Misc. General Expense during Construction (G282, G283, G286)	1,839,679
Working Capital (1, G10, 3, 5, 313, 321, 322, 323, 324, 332)	6,900,000
	$139,246,062
Franchises and Rights (G102)	7,781,000
(212 U. S. 219; 267 Fed. 231; Affirmed 258 U. S. 165)	
Total	$147,027,062

No allowance has been made in the above for going value, and no allowance, other than the sum of $7,781,000 has been made for franchises, easements, or any other property not specifically mentioned.

[fol. 3634] Notes Regarding Certain Necessary Elements of Cost in Reproducing the Property of the Company

Working Capital

(Accounts No. 1, G10, 3, 5, 313, 321, 322, 323, 324 and 332)

Working Capital may be defined as the total floating or mobile capital required in addition to the fixed capital. It may be in the form of Current Assets or in the form of Materials and Supplies. For the efficient and economical carrying on of the multitudinous transactions of daily operation, money has to be put into things which are not reflected in the fixed capital accounts as of any particular date of inventory, and a reservoir of cash has to be kept on hand, so as to handle current transactions promptly and economically. These elements of outlay and investment—representing property and assets actually and necessarily

used in the carrying on of the gas business—are grouped as "Working Capital," to the end that they may be included in the property and investment upon which a rate yielding a fair return is to be computed.

The Uniform System of Accounts for gas corporations defines the capital of such corporations to be and mean all property devoted to the rendering of the services of the production of the commodities which are within the purposes of the corporation. Capital, other than "Fixed Capital," is called "Floating Capital," and "Floating Capital" is divided into two major groups "Materials and Supplies" and "Current Assets." Current Assets include "Cash," "Accounts Receivable," "Bills Receivable," etc. Working Capital may perhaps best be considered in relation to these two elements separately.

The first element covers general stores and supplies. It covers the cost, including transportation of all materials and supplies acquired by the company for its gas operations.

The second element covers the funds necessary to meet payments incidental to the ordinary conduct of the business for the prompt payment of bills in order to procure trade discounts for advance payments which good business judgment makes necessary or desirable, and for the purchase of materials advantageously as to price, quantity and time. It also covers the floating assets for which expenditure has been made, but which are not yet reflected in fixed capital accounts, or for which collections have not been made. In this latter category are (1) accounts receivable, representing outlays for which moneys are due the company and have been billed to consumers, purchasers of appliances and other debtors; and (2) the sums which will later be billed to consumers for gas manufactured by the company and already used by such consumers, but which have not yet been billed. The company has already used and paid for oil, coal and other materials, and labor, in making this gas. On the average, about twenty days elapse between the furnishing of gas to a consumer, and the sending to him of the bill which transfers the debt to the status of an account receivable. Unless this element of gas furnished but not yet billed is allowed as a part of working capital, investors in the company will be denied a return

on a quantity of assets for which they have had to provide funds.

[fol. 3635] I have calculated the necessary Working Capital of the complainant, as above stated, to be for the company, the figure shown on the General Summary Sheet (Page 2), of this volume.

Concerning Undistributed Structural Costs

There are certain expenditures incident to the construction of a plant for making and distributing gas, all of which were made to some degree in constructing this property, under the costs and conditions from time to time prevailing, and all of which would have to be made under present costs and conditions to the extent now shown in reproducing this property as of the present time, and yet which cannot be accurately apportioned among the various inventoried items. These elements of unavoidable expenditures include:

Omissions and Contingencies,
Organization and Development Prior to Construction,
Cost of Financing,
Engineering and Superintendence, and General Contractor's Expense and Profit,
Interest During Construction,
Taxes During Construction, and
Administrative, Legal and Miscellaneous General Expense.

In making an inventory and appraisal of the reproduction cost of this complainant's property, I considered separately what would probably be the expenditures for such of the several services named, taking into account all the available facts bearing on the conditions and cost of reproducing this plant and system. In working out such an estimate of required outlays, I took the construction period as beginning when the sponsors or promoters of the project have secured the agreement of bankers to supply necessary funds. For the purpose of computing Undistributed Structural Costs, I have used a period of two years, not because it would be reasonably possible to complete the plant and distributing system in that period, but because it is a minimum period and, if the period should be extended, the undistributed structural costs will be increased.

Omissions and Contingencies

In estimating the cost of reproducing a gas manufacturing plant and appurtenant structures and equipment, allowance has to be made, as a practical matter, for omissions and contingencies, covering the following:

(1) A portion or percentage of the small units or items of machinery tools, implements and other property are always overlooked in the inventory, but their reproduction has to be provided for, nevertheless, in any present estimate.

(2) Small units of material, mechanism and supplies are lost or destroyed during construction. As to many items of materials and supplies, a larger quantity has to be delivered and paid for than could ever be checked up now, in the completed structures and equipment.

[fol. 3636] (3) Other contingencies arise: for example, strikes or labor difficulties, interruption or delaying of work from adverse weather, delay in shipments, or other conditions, unforeseen extra work, factors affecting the suitability or availability for use of materials, supplies, machinery, parts, etc., as needed, and the like. Expense arises in all such connections, for which advance provision has to be made in estimating cost to reproduce as of today.

The sum which I have estimated as necessary for the item Omissions and Contingencies, as to this company is that shown on the General Summary Sheets (Page 2). It amounts to about five per cent on the cost of reproducing the apparatus, plant equipment, etc., exclusive of the buildings and the distributing system.

Organization and Development Expenses Prior to Construction

(P. S. C. Accounts 101 and G-102)

This item covers the services and expenses necessary in the organization and development of the company from the time of the inception of the project to the time when the charter, franchises, local consents, permits, etc., have been procured, agreements obtained for the furnishing of the requisite capital and the project brought to a point where construction can be commenced.

2449

The costs comprised under this heading cover the compensation, on a reasonable salary basis, for the services of the sponsors; the salaries of stenographers, clerks and other assistants; general expenses, such as rent and traveling expenses; the expenses for obtaining the charter, including incorporation fee and the payment to the State on capital stock; expenses in connection with obtaining ordinances, franchises, permits and local consents, the cost of the many aspects of legal and engineering advice that is pre-requisite; other technical expenses; interest on expenditures incurred during this period, advertising, etc.

From the whole situation with respect to this company, I am of the opinion that a reasonable cost for Organization and Development prior to construction for the company, is the figure shown on the General Summary Sheet (Page 2), and that this expense could not be met as of the present time with a small outlay.

Cost of Financing

There is an additional element of cost, separate and distinct from bond discount, which will be incurred in reproducing this property. This cost covers services as real and as necessary as those of the lawyers, engineers, or of the mechanics on the work.

The expense of assembling the necessary capital is ordinarily reflected in the difference between the actual sale price of the securities to the ultimate investors and what the company itself realizes from such securities. One element in this difference represents the reasonable compensation for bankers' services in marketing the securities and forwarding the funds yielded. It covers individual and corporate expenses, and the expenses of examination, negotiation, advertising and selling through all the various stages until the sale to the ultimate investor is accomplished. Such an expense would be incurred even if the utility company dispensed with bankers and marketed its securities through its own salesmen and agents. In fact this latter method undoubtedly would require more time and cost more than if recourse were had to an existing banking house with an established reputation and clientele.

[fol. 3637] Another element in cost of financing arises out of underwriting, under the conditions of hazard as to the

launching of such an enterprise, in such a community at this time. A third element is the necessary legal and other expense necessary in the issuance of stocks and bonds, including printing, fees of Trustees and Registrars, etc. These elements of necessary expense, comprehending the cost of the organization furnishing services to the company, seem to me to be in the same class with the cost of services furnished by the engineering, legal and administrative organization of the company, and therefore constitute a part of the cost of reproduction. This element of Cost of Financing is a very substantial factor and the allowance which I have made and shown on the General Summary Sheet (Page 2), representing approximately five per cent on the project, is substantially below the figure for which this service could, in any probability, be procured under present conditions.

Engineering, Superintendence and General Contractor's Expense and Profit

(Account No. G-281)

Engineering work, including general design to provide for the construction of large gas properties, calls for a kind of experience not generally possessed by the operating engineers connected with such companies. In the case of this company there is every reason to suppose that it would be cheaper to secure the services of engineers fully equipped to handle designing work on a large scale than it would be to organize an engineering force for the purpose of making designs.

Work under this heading includes location surveys, general and detailed designs and drawings, preparation of specifications and such general supervision over the work during construction as to insure that the work is being carried out in accordance with the general plans. This is not intended to cover any of the detailed inspection either of the quality of the material or of the placing of the material, but it covers general supervision only and the preparation of detailed plans.

It is found to be much cheaper and more expeditious to let to a general contractor, who has the organization and equipment to build large plants and to install large dis-

tribution systems, than it is to organize and train a special construction force and to buy the necessary equipment in order to build such plants and install such distribution systems. If the utility company organizes a construction department and buys the construction plant, the chances of saving anything in cost are slight, and, on the other hand, the chances of material increases in cost due to the risk of working with a new and uncoordinated staff are very great. Almost every investor has knowledge of cases where enterprises have cost far more than the amount of the original estimates due to the placing of construction work in the hands of company employees, or contractors not qualified to handle it. The chance of the utility finding a man able and ready to organize a construction force and to assemble at a reasonable expense a construction plant is small; in fact, the chances are all against the utility in this respect and a wise management would save money by putting the work into the hands of contractors regularly organized for this class of work.

[fol. 3638] The work under this heading includes providing a construction plant, securing and tabulating bids from subcontractors and placing orders for buildings and apparatus, ordering and assembling material not included in subcontractors' estimates and placing and erecting this material, checking material and subcontractors' work and paying for same, coordinating the work of the subcontractors and of the general contractor and taking all necessary steps to secure the delivery of the required materials and parts of apparatus or buildings in such time and in such order as to insure the completion of each part of the plant and of the entire plant in the allotted time, and to reduce as much as possible the delays due to lack of prompt delivery of materials and mutual interference of the various working forces. It would require at least the figure shown on the General Summary Sheet (page 2), for the company to cover the Cost of Engineering, Superintendence, and General Contractors' Expenses and profit.

Interest During Construction

(Account No. G285)

Included in this category is the interest accruing upon the moneys (and credits available upon demand) acquired for use in connection with the construction and equipment of the property from the time of such acquisition until the construction is ready for use. This item also covers reasonable charges for interest for the construction period on the company's own funds used for construction purposes during such periods.

For the computation of interest during construction, the period of construction is defined to begin with the agreement of bankers to supply the funds necessary for construction, and to end when its operation begins.

For the purpose of computing the interest, it is assumed that the property would go into operation two years after the beginning of construction. All of the land would have to be purchased before beginning construction, and interest upon it should be figured for two years. An interest rate of eight per cent is taken for the obtaining of the requisite new capital by a gas company in this territory. As to cost of buildings and apparatus, and the cost of engineering, superintendence, administrative and legal service, and miscellaneous general expense, interest should be calculated for one year, at the eight per cent rate. There is also to be included interest at 8% during the two year construction period on the organization and development expenses prior to the beginning of construction.

The proper provision for interest during construction is the figure shown on the General Summary Sheet (Sheet 2).

Taxes During Construction

Included in this category are the various taxes and assessments levied by public authority and payable on property belonging to the corporation during the period of construction and before the plant is open for commercial operation. Taxes incident to operation only are not included, nor are the special taxes assessed for street and other improvements, such as grading, paving, sidewalks, guttering,

etc., which are chargeable to the account to which is charged the particular property benefitted.

[fol. 3639] Taking into account the period elapsing between a given construction expenditure and the first payment of taxes thereon, it is deemed proper to include taxes on land for a period of two years, and on improvements for a period of six months at the 1923 rate and assessed valuation.

On this basis, the required provision for Taxes During Construction is the figure shown on the General Summary Sheet (page 2).

Administrative, Legal and Miscellaneous General Expenses

(Account Nos. G282 and G286)

Included in this category are the salaries and expenses of executive and general officers, auditor, bookkeepers, timekeepers, inspectors and other employees of the company; the rent and expenses of the general office, insurance during construction, legal and court expenses, including the printing of briefs, legal forms, testimony, reports, etc.; payment to referees or arbitrators for the settlement of disputed questions; costs of suits for other causes than injuries to persons and payment of special fees, etc.; the expenses of the taking of depositions; also all construction and equipment items of a special and incidental nature not provided for under any other heading in this inventory.

During the construction period the administrative officers and legal department must look after many details. Bookkeeping, auditing and paymaster's departments must be organized to care for and account for the funds. Timekeepers and inspectors must check the delivery and quality of material and the amount and progress of the work so that the contractor may be paid from time to time without danger of being overpaid. The development of satisfactory public relations requires the attention of the general officers and as far as possible of everybody in the organization during this period. Negotiations and formalities incident to the issuance of securities have to be undertaken and completed. Permits from the municipal departments for opening the streets must be secured and questions relating thereto frequently require the attention of the higher of-

ficials of the company. The general officers should examine the bids from the subcontractors, advise as to the letting of subcontracts and keep themselves informed regarding the status of the subcontracts until the work covered by them is completed and the bills paid. During this same period an operating organization should be perfected and plans made for securing the business as rapidly as possible after the plant is put in operation.

The services and expenses of the administrative and legal staff, and the miscellaneous general expense, continue during the entire construction period.

For the item Administrative, Legal and Miscellaneous General Expenses my estimate for the present required expenditures, aggregates the figure shown on the General Summary Sheet (page 2).

[fol. 3640] Consolidated Gas Co.

General Summary of Costs

Manufacturing Stations

11th Street Station	$3,852,439.35
14th Street Station	1,542,475.78
21st Street Station	4,123,314.27
42nd Street Station	1,211,254 09
99th Street Station	1,037,869.67
	$11,767,353.16

Holder Stations and Miscellaneous Locations

15th Street Holder Station	$478,831 62
17th Street Holder Station	1,746.05
44th Street Holder Station	1,119,483.94
63rd Street Holder Station	641,922.47
65th Street Holder Station	1,305,299.14
111th Street Holder Station	1,133,048.26
132nd Street Holder Station	624,711.27
159th Street Shop	1,067.55
Kingsbridge Holder Station	1,125,121.88
	$6,431,252.18

[fol. 3641] 11th Street Station—Summary of Costs

Coal Handling Apparatus	$66,203.91
Generator House "A"	139,169.33
Generator House "A-1"	287,403.79
Boiler House "B"	96,264.36
Boiler House "B-1"	56,139.53
Boiler Room "B-2"	7,225.52
Boiler House "B-3"	63,556.56
Blower Room "C"	26,467.14
Engine and Blower House "C-1"	26,388.06
Water and Tar Pump House "E"	4,247.41
Oil Pump House "E-2"	2,214.59
Pump Room "C-1"	7,509.70
Shaving Scrubber Room "M"	36,267.62
Machine Shop "M"	1,165.78
Pipe Shop "M"	1,686.17
Store Room "M"	1,100.00
Shaving Scrubber House "H"	33,123.88
Condenser House "D-1"	117,328.73
Condenser House "G"	56,277.17
Exhauster Room "L"	34,997.77
Machine Shop "L"	1,470.39
Carpenter Shop "L"	522.67
Office Building "L"	1,239.84
Purifier House "O"	155,600 82
Purifier House "P"	179,983 71
Governor House "Q"	3,393 59
Governor House "Q-1"	3,224 45
Governor House "Q-2"	2,845 00
Governor House "Q-3"	2,778 50
Governor House "Q-4"	2,792 75
Yard	206,265 84
Pump Room "V"	3,379 77
Pump House S. W. of Tank #1	445 89
Pump Shed S. of Storeroom "R"	246 48
Pump House E. of "Q-1"	246 48
Pump House N. of Tank #1	708 13
Pump House S. E. of Tank #1	1,158 04
Shed S. of Governor House	232 13
Relief Holder #7	134,698 06

Commercial Holders, #8, #9, #10	1,746,208 29
General Connections	212,067 29
Small Piping	128,194 21
Total	$3,852,439 35

[fol. 3642] 14th Street Station—Summary of Costs

Purifier and Meters "A"	$108,733 45
Condenser House F-1	34,472 84
Exhauster and Engine Room E and E-1	9,093 38
Machine Shop E	422 76
Engine and Boiler House "D"	14,370 97
Office "C"	357 03
Rotary Scrubber House "H"	11,696 24
Retort House "K"	1,072,213 85
Tar and Ammonia Tank and Separator "T"	4,845 27
Coal House #1 "W"	26,915 98
Coke Passage "L" (Briquette Plant)	33,836 51
Coke Passage "L" (Coal Handling)	12,305 99
Gas Engine House "M"	4,588 83
Air Condenser "J"	54,239 16
Tower Scrubbers H-1	103,849 72
House "G"	134 25
Yard	5,739 19
General Connections	42,099 83
Small Piping	2,560 53
Total	$1,542,475 78

[fol. 3643] 14th Street Station

The Bartlett Hayward Company, Baltimore, Md.

Item	Material	Quantity, unit	Unit price	Total cost
	Building: Purifiers and Meters "A"—Apparatus:			
A-25 A-26 C-1	Kings Pressure Gauge, 0' 18"	4	$83.00	$332.00
A-27 C-2	12" U-Gauge	1	.....	9.00
A-156 C-3	Niagara Simple Steam Pump: 5" x 4" x 8". Service: Drip water	1	.....	118.32
A-156 C-3	Niagara Simple Steam Pump: 5" x 4" x 8"	1	.....	118.32

Item	Material	Quantity, unit	Unit price	Total cost
A-25 A-35 C-4	16' 0" diameter x 12' 6" long station meter with 4 Partition Drum, including ladders and platforms	2	11,500.00	23,000.00 7,425.29
D-8	Foundation for Meters	....	.....	
A-27 C-6	16' 0" x 25' 0" x 3' 2" Wet Seal Purifier Box, including cover, trays, and supports	4	.....	17,823.00
A-27 C-7	20" Center Seal	1	.....	3,082.00
D-7	Foundation	....	.....	14.82
	Carried forward			$51,922.75

[fol. 3644] Building: Purifiers and Meters "A" — Apparatus — Continued:

	Brought forward			$51,922.75
A-27 C-8	Hydraulic Operated Cover, Lifting Crane	2	981.00	1,962.00
A-27 C-5	24' 0" x 26' 0" x 3' 2" Wet Seal Purifier Box, including cover, trays, and supports	8	.....	47,228.00
A-27 C-7	20" Center Seal	2	3,082.00	6,164.00 140.70
D-6	Foundation for Center Seals	....	.....	
A-27 C-8	Mechanical Cover Lifting Crane	2	658.00	1,316.00
	Total			$108,733.45

[fol. 3645] Building: Condenser House F-1—Apparatus:

A-103 C-1	King's Pressure Gauge, 0" to 9"	2	66.00	$132.00
A-103 C-9	Steel Fresh Water Condensers, 42' 10" x 9' 8" x 14' 0" high, 648 4" C. I. tubes	2	15,714.00	31,428.00
D-35	Foundation	....	.....	2,912.84
	Total			$34,472.84

[fol. 3646] Building: Exhauster and Engine Room E and E-1—Apparatus:

A-91 C-1	King's Arch Pressure Gauge, 0 to 9"	12	66.00	$792.00
A-92 C-1	King's Arch Pressure Gauge, 0 to 6"	2	53.00	106.00
A-71 C-2	6" U-Gauge	1	.....	5.85
A-69 C-10	6" Crosby Pressure Gauge	1	.....	9.30
A-69 C-2	10" U-Gauge	1	.....	7.85
A-69 C-2	14" U-Gauge	1	.....	10.20
A-69 C-2	18" U-Gauge	1	.....	14.15

Item	Material	Quantity, unit	Unit price	Total cost
A-70 C-1	King's Pressure Gauge, 0" to 9"..	3	66.00	198.00
A-69 A-70 C-1	King's Pressure Gauge, 0" to 18"..	3	83.00	249.00
A-70 C-2	14" U-Gauge	2	10.20	20.40
A-70 C-2	4" U Gauge	1	.....	4.25
A-142 C-11	12" x 12" Greenfield Vertical Engine, direct connected to 29 Root's Gas Exhauster	1	.....	4,050.00
D-11	Foundation for Exhauster and Engine	....	.....	716.28
	Carried forward			86,183.28
[fol. 3647]	Brought forward			86,183.28
A-142 C-12	Wizard Lubricator, ½ pint.....	2	11.95	23.90
A-142 C-11	Root's Gas Exhauster 26, directly driven by Greenfield Vertical Engine, 9" x 9".....	1	.....	1,800.00
D-13	Foundation for engine and Exhauster	....	.....	996.20
	Total			$9,093.38
[fol. 3648]	Building: Machine Shop "E"—Apparatus:			
A-151 C-13	Sturtevant Blower 23, 24" diameter Impeller, driven by Main shaft; including Guard Rail. Service: Air Blast to Forges in Blacksmith Shop	1	.....	$152.32
A-74 C-2	6" U-Gauge	1	.....	5.85
A-72 C-14	5 H. P. Western Electric D. C. Motor with G. E. Starting Rheostat	1	.....	243.40
D-12	Foundation	....	.....	21.19
	Total			$422.76
[fol. 3649]	Building: Engine and Boiler House "D"—Apparatus:			
A-141 C-15	Davis-Pickering Horizontal Engine 16" x 42" driving Main Shaft...	1	.....	$6,591.70
D-15	Foundation for Engine	....	.....	631.77
A-141 C-16	MacKenzie Exhauster 210, driven from Main Shaft	1	.....	2,055.62
D-14	Foundation for Exhauster.....	....	.....	557.43
A-141 C-17	Sturtevant Steel Plate Blower, 5' 0" diameter, direct connected to, Sturtevant Vertical Engine, 4" x 3¼". Service: Forced Draft to Boiler	1	.....	1,004.53

Item	Material	Quantity, unit	Unit price	Total cost
D-18	Foundation for Blower and Engine	....	.....	5.42
A-141 C-18	Cameron Simplex Pump, 5" x 2½" x 6". Service: Boiler Feed.....	1	.....	172.28
D-2	Foundation for Pump	....	.....	5.57
A-142 C-19	Knowles Simplex Pump, 5" x 3¼" x 7". Service: Boiler Feed.....	1	.....	143.24
D-3	Foundation for Pump.....	....	.....	5.57
A-68 C-10	6" American Pressure Gauge.....	1	.....	8.39
A-142 C-12	½ Pint Lubricator.....	2	11.95	23.90
A-68 C-21	Horizontal Fire Tube Boiler, 5' 8" dia. x 16' 0" long, 64—4" Tubes.	1	.....	2,800.00
D-29	Foundation	....	.....	365.55
	Total			$14,370.97
[fol. 3650]	Building: Office "C"—Apparatus:			
A-97-5 C-2	16" U Gauge.....	3	11.80	$35.40
A-97-5 C-2	18" U Gauge.....	3	14.15	42.45
A-100 C-1	King's Arch Pressure Gauge, 0" to 9"	4	66.00	264.00
A-100 C-10	10½" Pressure Gauge.....	1	.....	15.18
	Total			$357.03
[fol. 3651]	Building: Rotary Scrubber House "H"—Apparatus:			
A-124 A-143 C-20	Ishell-Porter Ammonia Washer Scrubber, direct connected to Greenfield 7" x 7" Vert. Engine..	1	.....	$10,223.38
D-16	Foundation	....	.....	1,136.10
A-143 C-18	Cameron Simple Steam Pump, 5" x 2½" x 6". Service: Water to Scrubbers	1	.....	172.28
D-1	Foundation	....	.....	9.66
A-143 C-18	Cameron Simple Steam Pump, 3½" x 2" x 4". Service: Water to Scrubbers	1	.....	145.16
D-16	Foundation	....	.....	9.66
	Total			$11,696.24
[fol. 3652]	Building: Retort House "K"—Apparatus:			
A-106 C-21	Vertical Tubular Boiler, 2' 6" dia., 6' 0" high	1	.....	$315.35
A-106 C-21	Vertical Tubular Boiler, 3' 0" dia., 7' 0" high	1	.....	448.24
A-133 A-134 C-30	Metal lined coal pocket, 19' 6" x 34' 0" x 16' 8", including support	1	.....	5,818.00

Item	Material	Quantity, unit	Unit price	Total cost
A-144 C-18	Cameron Steam Pump No. 2, 4" x 3" x 7". Service: Tar to Burners	1	.....	192.60
D-5	Foundation	....	.....	14.89
	Carried forward			$6,789.08
[fol. 3653]	Brought forward			$6,789.08
	Building: Retort House, "K" —Apparatus (Cont'd):			
A-104 A-56 C-45	Battery of 24 Benches of 6 Retorts; 15" x 26" x 8' 9" long, half depth, generator type.....	1	.....	141,301.32
D-37	Foundation	....	.....	15,945.61
A-104 A-56 C-45	Battery of 30 Benches of 6 Retorts, 12" x 21" x 8' 3", direct fired...	4	167,884.50	671,538.00
D-34	Foundation	....	.....	79,208.75
A-105 C-28	Steam Operated Discharging machine	6	14,000.00	84,000.00
	Carried forward			$998,782.76
[fol. 3654]	Brought forward			$998,782.76
	Building: Retort House "K" —Apparatus (Cont'd):			
A-144 C-10	3" Pressure Gauge	1	.....	3.40
A-144 C-18	Cameron Simple Steam Pump, 12" x 7" x 12"	1	.....	480.70
A-144 C-18	Cameron Simple Steam Pump, 4" x 3" x 7". Service: Tar.	2	192.60	385.20
D-17	Foundation	....	.....	27.50
A-105 C-22	Tar Tank, 7' 0" diameter x 4' 3" high	1	.....	162.00
A-106 C-28	Steam Operated Charging Machine	6	10,000.00	60,000.00
A-31 C-41	28" Gauge Industrial Track, 25# rail, steel ties	1,163 ft.	1.02	1,186.26
A-31 C-41	One-way Switch	3	50.00	150.00
A-31 C-41	28" Gauge Curved Track, steel ties	51.5 ft.	1.17	60.26
A-32 C-41	8' 3" gauge, track for charging and discharging machines, 60# rail..	1,562	3.836	5,991.82
A-32 C-41	14' 0" dia. turntables, including windlass	6	550.	3,300.00
D-26	Pit	....	.....	1,683.94
	Total			$1,072,213.85
[fol. 3655]	Building: Tar and Ammonia Tank and Separator "T"— Apparatus:			
A-139 C-23	Wooden Tar Tank, 17' 2" diameter x 15' 0" high, conical top.....	1	.....	$841.93
A-139 C-23	Wooden Ammonia Tank, 20' 4" diameter x 19' 3" high, conical top	1	.....	1,100.80
D-19	Foundation for above two tanks..	....	.....	949.21

Item	Material	Quantity, unit	Unit price	Total cost
A-139 C-23	Wooden Separator Tank, 7' 8" diameter x 7' 0" high, conical top	1		182.60
A-139 A-140 C-24	Supports, platforms and stairs for above tanks	....	.....	96.44
A-145 C-18	Cameron Simple Steam Pump, 8" x 9" x 13". Service: Tar.	1	.....	768.13
D-4	Foundation	....	.....	16.16
A-145 C-18	Cameron Simple Steam Pump, 5" x 2½" x 6"	1	.....	160.28
A-145 C-26	Worthington Simple Steam Pump, 12" x 9" x 9"	1	.....	729.72
	Total			$4,845.27

[fol. 3656] Building: Coal House No. 1 "W"—Apparatus:

A-132 C-25	Fairbanks Platform Scale, 10 ton capacity, 8' 0" x 14' 6" platform	1	.....	$288.56
D-9	Foundation	....	.....	326.91
A-165 C-27	Coal Handling Unit—of 6 Hoisting Drums, shafting, 5 trolleys, track, rope, etc., 7 Dump Buckets, 4 clamshell buckets ..... Service: for elevating coal to coal shed.	1	.....	24,161.46
D-20	Foundation	....	.....	112.15
A-154 C-29	10" x 24"—Duncan Crampton 2-cylinder oscillating steam engine. Service: Auxiliary Drive	1	.....	2,000.00
D-22	Foundation	....	.....	26.90
	Total			$26,915.98

[fol. 3657] Building: Coke Passage "L" —Apparatus:

Briquette Plant

A-118 C-32	Williams Pitch Pulverizer	1	.....	$548.83
A-117 C-31	Trump Measuring Machine	1	.....	549.86
D-25	Foundation for Above Pulverizer and Measuring machine	....	.....	539.63
A-117 C-32	Screw Conveyor in sheet metal trough, 6' 0" x 1' 2" x 1' 2"	1	.....	180.90
A-120 C-44	Bucket Elevator, 10' 10", center to center sprockets	1	.....	512.26
A-122 C-44	Bucket Elevator, 20' 6", center to center sprockets	1	.....	686.08
D-21	Concrete Pit for Bucket Elevators	1	.....	4,842.28
A-119 C-32	40" 4 cage disintegrator, including guard rail	1	.....	1,364.44
D-40	Foundation	....	.....	257.64
A-120 C-43	Inclined Revolving Steel Mixing Chamber, 15" dia. x 17' 0" long	1	.....	204.90
A-122 C-32	5-Ton Briquette Press, including platform and ladder	1	.....	10,000.00

Item	Material	Quantity, unit	Unit price	Total cost
D-41	Foundation	....	.....	319.98
A-122 C-39	Apron Conveyor, 54' 0", center to center sprockets	1	.....	442.76
	Carried forward			$20,448.66
[fol. 3658]	Brought forward			$20,448.66
	Building: Coke Passage "L" —Apparatus (Cont'd):			
A-120 C-47	Briquette Dryer, with 2 furnaces, including Structural Steel supports	1	.....	2,143.35
D-24	Foundation	....	.....	170.64
A-120 C-44	Bucket Elevator, 18' 6", centers steel encased	1	.....	651.78
A-121 C-46	Bench of one inclined retort, 20' 3" long, 6' 8" wide, 5' 3" high.....	1	.....	5,009.00
D-42	Foundation	1	.....	276.84
A-119 C-33	Briquetting Plant Transmission...	1	.....	804.87
A-152 C-29	12" x 14" Buckeye Simple Horizontal steam engine	1	.....	4,133.13
D-36	Foundation	....	.....	198.24
	Total			$33,836.51
[fol. 3659]	Building: Coke Passage "L" —Apparatus:			
	Coal Handling			
A-152 C-29	12" x 12" Buckeye Vertical Steam Engine, including guard rail. Service: Drive for coal conveying machinery	1	.....	$4,738.92
A-126 C-38	Link Belt Coal Crusher, equipped with reciprocating leader, and including belting, transmission, etc. Service: Breaking coal for retorts	1	.....	2,048.22
A-127 C-39	Combination scraper conveyor, one section 98' 0" long and one 24' 0" long, including wooden trestle support and housing. Service: Conveying Coal to Coal pocket in Retort House	1	.....	2,536.67
D-28	Foundation for Engine, Crusher and conveyor	....	.....	1,916.36
A-134 C-42	Coal Chutes from scraper conveyor to coal pocket in Retort House..	1	.....	233.40
A-136 C-25	Fairbanks Warehouse Scale, platform 5' 0" x 4' 6".....	1	.....	260.16
D-27	Foundation	....	.....	110.12
A-131 C-41	28" gauge, 25# Industrial Track..	132 ft.	$1.02	124.64
A-136 C-25	Fairbanks Industrial track scale with 6'-6" turbine.....	1	.....	337.55
	Total			$12,305.99

Item	Material	Quantity, unit	Unit price	Total cost
[fol. 3660]	Building: Gas Engine House "M"—Apparatus:			
A-153	2 Cylinder 10" x 12" Westinghouse	1	.....	$3,104.58
C-29	Gas Engine, including guard rail	....	.....	500.75
D-23	Foundation			
A-136	Single Hoisting Drum 13¾" dia.	2	491.75	983.50
C-34	with guards, including shafting			
	Total			$4,588.83
[fol. 3661]	Building: Air Condenser "J" —Apparatus:			
A-107	Air Condenser 7' 6" wide x 105' 3"			
C-35	long x 10' 6" high. 132 tubes 25" dia., 132 tubes 6" dia. with ladder and railing.....	1	.....	$43,517.00
D-39	Foundation	....	.....	10,722.16
	Total			$54,239.16
[fol. 3662]	Building: Tower Scrubbers, H-1:			
A-22	Tower Scrubbers 16'-6" dia. 61' 0"	2	39,242.00	$78,484.00
A-23	high, including trays, etc.....			
C-36				25,365.72
D-38	Foundation	....	.....	
	Total			$103,849.72
[fol. 3663]	Building: House "G" —Apparatus:			
A-156	B. F. Sturtevant No. 2 Centrifugal	1	.....	$55.73
C-13	Blower			
A-156	B. F. Sturtevant No. 3 Centrifugal	1	.....	78.52
C-13	Blower			
	Total			$134.25
[fol. 3664]	Building Yard—Apparatus:			
	(West of Retort House K)			
A-155	Lambert 7" x 10" Hoisting Engine	2	853.	$1,706.00
C-37		....	.....	155.55
D-30	Foundation			
A-33	Inclined steel coke trestle 42' 0"	2	435.	840.00
C-40	long x 16' 0" high.....	....	.....	572.97
D-31	Pit and foundation for bents.....			
A-33	28" gauge industrial track on	84 ft.	2.10	146.40
C-40	trestles			
	(East of Retort House K)			
A-135	Inclined Steel Coke Trestle, 60' 0"	2	688.50	1,377.00
C-40	long, x 22' 0" high.....	....	.....	629.27
D-32	Pit and foundation for bents.....			
A-135	28" Gauge Industrial Track on	120 ft.	2.10	252.00
C-40	trestles			
	Total			$5,739.19

Item	Material	Quantity, unit	Unit price	Total cost
[fol. 3665]	Building: General Connections:			
	Gas Pipe			
B-5	4" C. I. B. & S. Pipe	72 lin. ft.	$1.85	$133.20
"	12" " " "	153 "	4.87	745.11
"	20" " " "	1,069 "	9.42	10,164.18
"	24" " " "	85 "	12.29	1,044.65
"	30" " " "	592 "	15.90	9,412.80
"	20" Riveted Steel "	166 "	5.50	913.00
	Total	2,147		$22,412.94
	Pipe Fittings			
B-41	6" C. I. Flanged Fittings	248 lbs.	.1231	$34.22
"	12" " " "	900 "	.1154	103.86
"	16" " " "	10,274 "	.1118	1,148.97
B-40	20" " " "	11,951 "	.1141	1,363.61
B-39	24" " " "	632 "	.1139	71.98
B-41	30" " " "	5,350 "	.1232	661.58
B-41	12" " B & S "	1,448 "	.0990	143.35
B-40	20" " " "	65,586 "	.1017	6,670.10
B-39	24" " " "	7,750 "	.1038	804.45
B-39	30" " " "	29,415 "	.1136	3,341.54
B-40	20" " Riveted Steel	1,640 "	.1600	262.40
	Total	135,247 "	.....	$14,606.06
	Valves			
B-6	6" I. S. Gate Valve	1 each	47.54	$47.54
"	12" " " "	2 "	92.34	184.68
"	20" O. S. " "	13 "	213.35	2,773.55
"	20" I. S. " "	3 "	182.02	546.06
"	30" O. S. " "	2 "	413.00	826.00
"	30" I. S. " "	2 "	351.50	703.00
	Total	23		$5,080.83
	Summary			
Gas Pipe		2,147 lin. ft.	.....	$22,412.94
Gas Pipe Fittings		135,247 lbs.	.....	14,606.06
Valves		23		5,080.83
				$42,099.83
[fol. 3666]	Building: Small Piping:			
	Standard Steel Pipe			
B-5	¼" Diameter Pipe	90 lin. ft.	$.27	$24.30
"	⅜" " "	251 "	.24	60.24
"	½" " "	494 "	.30	148.20
"	¾" " "	703 "	.37	260.11
"	1" " "	222 "	.51	113.22
"	1¼" " "	682 "	.73	497.86
"	1½" " "	227 "	.88	199.76
"	2" " "	357 "	1.13	403.41
"	2½" " "	8 "	1.81	14.48
"	3" " "	132 "	2.07	273.24
"	4½" " "	21 "	3.58	75.18
"	6" " "	42 "	5.40	226.80
	Total	3,129		$2,304.33

Item	Material	Quantity, unit		Unit price	Total cost
	Standard Galv. Steel Pipe				
B-5	$\frac{3}{4}$" Diameter Pipe	146	"	.42	$61.32
"	1" " "	44	"	.68	30.54
"	$1\frac{1}{4}$" " "	120	"	.82	98.40
	Total	329			$196.26
	Pipe Covering				
B-5	3" Diameter Pipe Asbestos	111	"	.54	$59.94

[fol. 3667] Building: Small Piping (Continued):

Summary

Standard Steel Pipe	3129	Lin. Ft.	$2,304.33
Standard Galvanized Steel Pipe	329	"	196.26
Pipe Covering	111	"	59.94
Total			$2,560.53

[fol. 3668] **15th Street Holder Station**

Summary of Costs

Holder	$372,995.35
Boiler House "R-2"	28,322.17
Exhauster House "R"	26,895.06
General Connections	44,392.91
Small Piping	6,226.13
Total	$478,831.62

[fol. 3669] **17th Street Station**

Summary of Costs

	1923
Yard, Ave C	$1,746.05
Total	$1,746.05

[fol. 3670] **21st Street Station**

Summary of Costs

	1923
Garage "A"	$1,557.18
Garage "C"	8.39
Valve House "D"	6.65
Valve House "E"	231.00
Valve House "F"	36.90
Riggers Storage "G"	409.04
Paint Shop "G-1"	13.60
Office "K" and Laboratory	48.79
Generators "H-g"	18,416.97
Operating floor "H-g"	561,479.72
Exhauster, Engine and Blower Room "H-1"	108,522.85
Machine Shop and Store Room "H-2"	5,771.27
Blacksmith Shop "H-1"	670.48

	Total cost
Boiler House "H-b"	268,406.64
Condensers "H-c"	158,303.04
Shops and Pumps "H-s"	2,541.58
Salt Water Pump House "H-s"	16,446.05
Scale House "H-s"	1,537.29
Pump House "N"	7,814.11
Roundhouse	677.93
Yard Tanks	74,414.98
Coal House "V" #1	17,394.00
Coal Hoist "D-c"	16,008.38
Strainer House "D-a"	1,386.30
Yard "C-3" Oil Tanks	30,116.43
Storage Shed "V-2"	1,862.70
Storage Shed "V-3"	2,168.82
Storage Shed "V-4"	10,476.64
Storage Shed "V-5"	1,755.95
Storage Shed "V-6"	13,563.60
Purifying House #2 "U"	88,534.45
Purifiers and Scrubbers "T"	58,150.07
Shaving Scrubbers "S"	132,216.36
Purifying House #1 "R"	134,289.75
Meter House "O"	103,507.98
Exhauster and Engine House "W"	60,551.92
Yard, West of Holder #7	9,632.35
Relief Holders	302,637.30
Commercial Holders	1,284,835.60
General Connections	417,176.55
Small Piping	200,732.66
Total	$4,123,314.27

[fol. 3671] 42nd Street Station

Summary of Costs

Valve House "A"	$2,813.70
Holder Yard	121,432.46
Office & Meter House "C-1"	32,411.55
Engine Room "C-1"	8,928.74
Purifier House "C"	111,244.07
Tank #5 "X"	654.00
Scrubber & Condenser House "E-1"	55,115.39
Exhauster & Engine House "E-1"	15,384.16
Condenser & Scrubber House "D"	49,291.71
Retort House #2 and #3 "E"	239,538.22
Retort House #1 "D"	323,074.52
Vaults "V"	16,354.91
Drip Oil Tanks "T-1"	1,466.40
Scale House "D-1"	160.01
Coal Storage "K"	521.41
Purifier House "O"	3,624.69
Tanks "G"	9,516.52
Yard "W"	26,135.48
Pump House "P"	1,228.85
Trestle & Bridge "T"	6,029.84
Boiler & Engine House "L"	25,264.48
General Connections	113,090.50
Small Piping	47,942.54
Total	$1,211,254.09

42nd Street Station

[fol. 3672] The Bartlett Hayward Company, Baltimore, Md.

Item	Material	Quantity, unit	Unit price	Total cost
	Building: Valve House "A" —Apparatus:			
A-94	30" Balance Governor, Including	1	.....	$2,552.50
C-2	Four way Foot Valve.....	2	10.50	21.00
A-94	12" U Gauge			
C-8		1	.....	28.20
A-94	36" U-Gauge			
C-8				
A-94	Kings Arch Pressure Gauge, 0 to	4	53.00	212.00
C-10	6"			
	Total			$2,813.70
	[fol. 3673] Building: Holder, Yard—Apparatus:			
A-93	2-Lift Storage Holder in Brick			
C-55	Tank, 96' 10" dia. x 21' 6" deep. Capacity 250,000 cu. ft. including Tank and Cup Heating arrangement, known as Holder 23.....	1	.....	$46,168.00
		....	.....	10,406.00
D-36	Brick Tank			
A-80	9' 0" dia. Station Meter with 4 par-	1	.....	4,446.00
C-11	tition drum	....	.....	82.86
D-61	Foundation			
	Total			$121,472.46
	[fol. 3674] Building: Office and Meter House C-1—Apparatus:			
A-75	Kings Arch Pressure Gauge, 0 to	4	53.00	$212.00
C-10	6"			
A-80	14' 0" dia. Station Meter 14' 0"	1	.....	10,700.00
C-11	long, with 3 partition Drum 21..	....	.....	2,519.32
D-63	Foundation			
A-80	11' 0" dia. Station Meter, 11' 0"	1	.....	7,100.00
C-11	long, with 4 partition drum 22..	....	.....	1,226.49
D-52	Foundation			
A-80	12' 0" dia. Station Meter, 12' 0"	1	.....	9,100.00
C-11	long, with Hinman Drum 23....	....	.....	1,553.44
D-61	Foundation			
	Total			$32,411.55
	[fol. 3675] Building: Engine Room "C-1"—Apparatus:			
A-15	Mackenzie Exhauster, capacity			
A-87	2,500 cu. ft. per minute, belted to			
C-1	Wright Horizontal Steam Engine 12" x 24", including belt and belt guards, and belt tightener.....	1	.....	$5,566.63
		....	.....	1,580.58
D-67	Foundation for Exhauster.....	....	.....	1,053.29
D-54	Foundation for Engine.....	1	.....	11.95
A-14	½ Pint Lubricator.....			
C-57				

Item	Material	Quantity, unit	Unit price	Total cost
A-50 C-38	Exhauster Governor $2\frac{1}{2}$" steam connection	1	.....	200.00
A-64 C-42	7" Pressure Gauge	1	.....	8.30
A-67 C-40	$10\frac{1}{2}$" Kings Pressure Gauge 0-18"	4	83.00	332.00
A-45 C-8	12" U Gauge	3	10.50	31.50
A-75 C-8	20" U Gauge	1	.....	18.60
A-15 C-41	3-Gallon Gravity Type Lubricator, with 4 sight feeds	1	.....	35.80
	Total			$8,928.74
[fol. 3676]	Building: Purifier House "C"—Apparatus:			
A-87 C-37	Wet Seal Purifier Box, 11' 6" x 7' 9" x 3' 3, including covers and trays	4	1,000.	$4,000.00
D-50	Foundation	....	.....	5,751.80
A-87 C-34	12" Center Seal	1	.....	1,919.00
D-60	Foundation	....	.....	110.84
A-87 C-35	Hydraulic Cover Lifting Crane	1	.....	721.00
A-87 C-38	Wet Seal Purifier Box, 20' 0" x 22' 0" x 3' 6", including covers and trays	8	4,972.	39,776.00
D-49	Foundation	....	.....	17,390.86
A-86 C-33	20" Center Seal	2	3,082.	6,164.00
D-60	Foundation	....	.....	221.68
A-87 C-56	Hydraulic Cover Lifting Crane	2	1,980.	3,960.00
A-87 C-48	Wet Seal Purifier Boxes, 16' 0" x 27' 6" x 3' 6", Including covers and trays	4	5,013.	20,052.00
D-47	Foundation	....	.....	3,567.53
A-86 C-32	20" Center Seal	1	.....	4,403.00
D-68	Foundation	....	.....	6.36
A-87 C-36	Mechanical Cover Lifting Crane	1	.....	1,200.00
	Total			$111,244.07
[fol. 3677]	Building: Tank No. 5 "X"—Apparatus:			
A-91 C-31	Steel Oil Storage Tank, 4' 0" dia. x 25' 0" long, including covering	1	.....	$654.00
	Total			$654.00

[fol. 3678] Building: Scrubber and Condenser House "E-1" Apparatus:

Item	Material	Quantity, unit	Unit price	Total cost
A-76 A-77 C-42	Condenser, 5' 0" dia. x 20' 0" high, 1473" W. I. Tubes, including ladder	2	2,105.	$4,210.00 228.92
D-65	Foundation	....	.....	
A-76 A-44 C-45	Cast Iron Scrubber, 7' 0" x 5' 3½" x 14' 2½", including ladder	1	.....	6,105.00 81.94
D-66	Foundation	....	.....	
A-76 C-40	Salt Water Condenser, 42" 6" x 4' 10" x 14' 4" high, 576—4" C. I. Tubes x 11' 0" long	1	.....	13,949.00 5,431.31
D-48	Foundation	....	.....	
A-76 C-48	Standard Ammonia Washer, 13 chambers, 8' 0" dia x 16' 0" long	1	.....	9,493.00 92.98
D-59	Foundation	....	.....	
A-76 C-61	Laycock and Clapham Patent Washer 8' 0" dia. x 21' 6" long, belted to	1	.....	11,056.00
A-19 A-79 C-4	9" x 9" Greenfield Vertical Engine, including belt guards	1	.....	849.94 2,939.02
D-45	Foundation for Washers	....	.....	157.80
B-56	Foundation for Engine	....	.....	
	Carried forward			$84,954.91
	Brought forward			$84,954.91

[fol. 3679] Building: Scrubbers and Condenser House "E-1"—Apparatus (Continued):

A-77 C-8	10" U-Gauge	1	.....	15.05
A-77 C-9	Thermometer, 9" High	1	.....	19.33
A-79 C-61	Wooden Tank, 3' 0" x 1' 6" x 1' 6", including supports. Service: Circulating Water for Washer	1	.....	8.00
A-79 C-24	C. I. Tank, 3' 0" x 1' 0" x 1' 3", including supports. Service: Circulating Water for Washer	1	.....	22.50
A-88 C-25	Semi-Cylindrical Steel Tank, 4'6" diameter x 5'-0" high. Service: Oil storage for retorts	1	.....	125.00
	Total			$85,145.39

[fol. 3680] Building: Exhauster and Engine House "E-1"—Apparatus:

A-11 C-3	Greenfield Vertical Steam Engine, 7" x 7", including Engine Guards. Service: Sturtevant Blower 27 and Standard Ammonia Washer	1	.....	$356.71 2.26
D-32	Foundation	....	.....	11.95
A-10 C-57	½ Pint Lubricator	1	.....	

Item	Material	Quantity, unit	Unit price	Total cost
A-10 C-57	3 Gallon Gravity Type Lubricator, with six sight feeds	1	.....	38.60
A-57 C-15	8" Ashcroft Pressure Gauge, 0# to 100#	1	.....	10.91
A-67 C-8	24" U-Gauge	3	20.30	62.40
A-67 C-8	14" U-Gauge	1	.....	11.70
A-69 C-10	10½" Kings Pressure Gauge 0" to 9"	2	66.00	132.00
A-69 C-10	10½" Kings Pressure Gauge 0" to 18"	2	83.00	166.00
A-69 C-10	Kings Arch Pressure Gauge, 0" to 9"	1	.....	66.00
A-69 D-67	Kings Arch Pressure Gauge, 0" to 6"	1	.....	53.00
	Carried forward			$1.111.83
[fol. 3681]	Building: Exhauster and Engine House "E-1"—Apparatus (Continued):			
	Brought forward			$1.111.83
A-9 A-69 A-71 C-1	Mackenzie Exhauster, capacity 2500 cu. ft. per minute, and Mackenzie Exhauster, capacity 3,000 cu. ft. per minute; bolted through countershaft to Porter Horizontal Steam Engine, 16" x 30", including belting, guards, etc.	1	.....	9.814.04
D-44	Foundation for two Mackenzie Exhausters	....	.....	681.07
D-43	Foundation for Porter Engine	....	.....	978.64
A-70 C-58 A-11 C-2	Exhauster Governor 4" steam connection Mackenzie Exhauster, capacity 500 500 cu. ft. per minute direct connected to Isbell-Porter Vertical Engine 7" x 7", including Engine Guard	1	.....	450.00 1.680.13
D-46	Foundation	....	.....	518.39
A-70 C-58	Exhauster Governor, 1¼" Steam Connection	1	.....	150.00
	Total			$15.384.10
[fol. 3682]	Building: Condenser and Scrubber House "D"—Apparatus:			
A-74 C-51	Floyd Washer and Cooler, 5' 5" x 8' 0" x 9' 2½"	1	.....	$1.326.00
D-40	Foundation	....	.....	436.56
A-74 C-44	Vertical Hot Scrubber 8' 0" dia. x 18' 0" high, including platform.	2	3.882.	7.764.00
D-41	Foundation	....	.....	1.887.56

Item	Material	Quantity, unit	Unit price	Total cost
A-74 C-41	Fresh Water Condenser, 43' 9" x 7' 0" x 17' 0" high, 1040—4" W. I. tubes x 12' 0" long	1	.....	13,316.00
D-42	Foundation	....	.....	4,467.62
A-81 C-64	Wood Tank, 1' 6" x 3' 6" x 1' 9", including ladder and supports, Service: Water Storage for condenser	1	.....	29.00
A-74 C-43	Air Condenser 14' 8" x 11' 8½" 48' 0" long, 32—16" dia. tubes x 46' 0" long, including supports, etc., platforms, etc.	1	.....	16,921.00
D-34	Support	....	.....	3,143.97
	Total			$49,291.71

[fol. 3683] Building: Retort House—No. 2 & 3 E—Apparatus:

A-13 C-3	Sturtevant Blower #7, Belt driven by Greenfield Engine in Exhauster House, E-1, including belt and guards. Service: Forced Draft for Retorts	1	.....	$636.49
D-1	Foundation	....	.....	4.03
A-13 C-17	Simple Steam Pump, 2" x 3" x 9" Service: Drip water	1	.....	145.16
D-37	Foundation	....	.....	4.77
A-73 C-16	Industrial Track, 16# rail, no Ties 180' 0"	....	.40	72.00
A-84 C-49	Battery of 20 Benches of 7 stop end Retorts, 14" x 24" x 9' 0", All inside generators	1	.....	113,754.00
D-6	Foundation	....	.....	7,442.92
A-84 C-49	Battery of 20 Benches of 6 stop end Retorts, 14" x 24" 9' 0" 14 direct fired benches 6 inside generator Benches	1	.....	101,253.71
D-4	Foundation	....	.....	17,195.51
	Total			$239,538.22

[fol. 3684] Building: Retort House No. 1 "D"—Apparatus:

A-84 C-49	Battery of 20 benches, 6 stop end retorts, 14" x 24" x 9' 0". All inside generators	3	101,191.20	$303,573.60
D-3	Foundation	....	.....	19,322.48
A-81 C-53	Double Purchase Winch, 7" dia. x 18" long	1	.....	45.00
A-83 C-59	Portable Coke Chute	6	22.24	133.44
	Total			$323,074.52

Item	Material	Quantity, unit	Unit price	Total cost
[fol. 3685]	Building: Vaults "V"—Apparatus:			
	Boiler Room			
A-6 C-19	Horizontal Fire Tube Boiler, 21 and 22 5' 6" dia. 57—3" tubes 13' 0" long, including covering	2	2,650	$5,300.00
D-58	Foundation	....	.....	156.00
A-60 C-62	Boiler Breeching	....	.....	401.00
A-6 C-19	Horizontal Fire Tube Boiler, 23 7' 6" dia. 97—3" tubes 11' 0" long, including covering.....	1	.....	3,519.00
D-57	Foundation	....	.....	63.15
A-60 C-62	Boiler Breeching	....	.....	248.00
A-6 C-14	150 H. P. Hoppes Open Type Feed Water Heater	1	.....	240.47
A-59 C-15	7" Ashcroft Pressure Gauge	3	8.39	25.17
A-78 C-47	Steel Stack, 30" dia. x 45' 0"	1	.....	424.00
D-63 A-78	Foundation	....	.....	440.50
C-54	Steel Stack, 30" dia. x 44' 6".....	1	.....	419.00
D-61	Foundation	....	.....	311.54
A-59 C-60	Steel Tank, 4' 3" dia. x 5' 6" Service: Feed Water	1	.....	129.00
	Carried forward			$11,677.82
[fol. 3686]	Building: Vaults "V"—Apparatus (Cont'd):			
	Brought forward			$11,677.82
	Boiler Room (Cont'd)			
A-6 C-5	Blake Simple Steam Pump, 6½" x 4⅛" x 8", Service: Boiler Feed	2	154.00	308.00
D-17	Foundation	....	.....	13.84
A-59 C-57	½ Pint Lubricator	2	11.95	23.90
A-6 C-5	Knowles Air Compressor, 9" x 18" x 18" Service: Air to Retorts...	1	.....	1,226.20
A-59 C-61	6' 0" x 2' 0" x 10" Steel Air Tank	1	.....	150.00
D-25 D-26	Foundation for Compressor and Tank	....	.....	18.50
A-59 C-8	24" U-Gauges	1	.....	20.00
	East End			
A-6 C-17	Niagara Simple Steam Pumps, 5" x 3" x 10" Service: Tar Pump..	1	.....	118.32
D-24	Foundation	....	.....	6.36
A-6 C-5	Knowles Duplex Steam Pump, 7½" x 5" x 10".....	1	.....	710.80

Item	Material	Quantity, unit	Unit price	Total cost
A-17	9" x 9" Greenfield Vertical Engine,			
C-4	driving main shaft including Belt and Guards	1	.....	925.14
			.....	157.80
D-36	Foundation	....	.....	
	Carried forward			$15,306.58
[fol. 3687]	Brought forward			$15,306.58

Building: Vaults "V"—Apparatus (Cont'd)

Under 41st Street Sidewalk

A-16	Simple Steam Pump, 7½" x 5" x			
C-17	15" Service; Drip Oil	1	.....	372.39
D-28	Foundation	....	.....	39.94
A-91	Steel Tar Tank, 2' 9" x 6' 0" x	2	288.00	576.00
C-46	16' 0" long			
	Total			$16,354.91

[fol. 3688] Building: Drip Oil Tanks T-1—
Apparatus:

A-90	Steel Drip Oil Tank, Semi-Cylindri-	1	.....	$261.00
C-27	cal 6' 0" dia. x 9' 0" high	.....	.....	406.64
D-31	Support for tank			
A-90	Steel Drip Oil Tank, 6' 6" dia. x	1	.....	249.00
C-26	5' 6" high	....	.....	448.40
D-33	Support for tank			

Yard R

A-90	Steel Semi-Cylindrical Drip Oil	1	.....	82.00
C-63	Tank, 5' 6" dia. x 3' 0" high	....	.....	19.36
D-35	Foundation			
	Total			$1,406.40

[fol. 3689] Building: Scale House D-1—
Apparatus:

A-33	4 Ton Warehouse Scale, 6' 0" x	1	.....	$143.06
C-13	4' 0" Platform	....	.....	16.95
D-30	Foundation			
	Total			$160.01

[fol. 3690] Building: Coal Storage "K"—
Apparatus:

A-91	Steel Drip Tank, 4' 6" dia. x 25' 3"	1	.....	$486.00
C-20	long	....	.....	35.41
D-27	Foundation			
	Total			$521.41

Item	Material	Quantity, unit	Unit price	Total cost
[fol. 3091]	**Building: Purifier House "O"—Apparatus:**			
A 90 C 23	Purifier Box, 20' 6" x 12' 10" x 3' 4¼", Wet Seal	1	.....	$3,160.00
D 2	Foundation	....	.....	458.69
	Total			$3,624.69
[fol. 3092]	**Building: Tanks "G"—Apparatus:**			
A 7 C 17	Niagara Simple Steam Pump, 6" x 5" x 13". Service: Ammonia	1	.....	$147.74
D 22	Foundation	....	.....	3.18
A 7 C 6	Worthington Simple Steam Pump, 7½" x 8½" x 6". Service: Tar	1	.....	294.95
D 23	Foundation	....	.....	2.73
A 88 C 22	Wooden Lead Lined Tar Well, 20' 0" x 24' 0" x 8' 0"	2	2,407.00	4,814.00
D 10	Foundation	....	.....	2,502.15
A 88 C 22	Wooden Ammonia Well, 20' 6" x 15' 0" x 7' 0"	1	.....	392.00
D 7	Foundation	....	.....	125.53
A 88 C 65	Wooden Lead Lined Separator, 7' 0" x 14' 0" x 8' 0" deep	1	.....	709.00
D 13	Foundation	....	.....	265.44
	Total			$9,510.52
[fol. 3093]	**Building: Yard "W"—Apparatus:**			
A 91 C 20	Steel Oil Storage Tank, 8' 0" dia. x 25' 0" long	8	822.00	$6,576.00
D 12	Foundation	....	.....	5,234.14
A 89 C 28	Steel Drip Oil Separating Tank, 8' 0" dia. x 29' 9" long	2	870.00	1,740.00
D 8	Foundation	....	.....	496.18
A 89 C 22	Wooden Ammonia Tank, 30' 0" dia. x 15' 0" high, with cover	1	.....	1,700.00
D 9	Foundation	....	.....	4,035.04
A 89 C 39	Steel Naptha Tank, 30' 0" dia. x 21' 6" high. Wooden top	1	.....	4,391.00
D 11	Foundation	....	.....	1,963.12
	Total			$26,135.48
[fol. 3094]	**Building: Pump House "I"—Apparatus:**			
A 5 C 17	Niagara Simple Steam Pump, 10" x 7" x 8". Service: Oil from tanks to works	1	.....	$441.39
D 19	Foundation	....	.....	7.21
A 5 C 6	Worthington Duplex Pump, 10" x 10½" x 10". Service: Oil from barges	1	.....	617.20
D 15	Foundation	....	.....	8.84

Item	Material	Quantity, unit	Unit price	Total cost
A-5 C-17	Simple Steam Pump, 6½" x 3" x 6". Service: Oil from tanks to works	1	.....	147.74
D-18	Foundation	....	.....	6.27
	Total			$1,228.85
[fol. 3695]	Building: Trestle and Bridge "T"—Apparatus:			
A-183 A-185 C-16	Industrial Track, straight 36" gauge, no cross ties	2,032 ft.	.40	$812.80
A-183 A-185 C-16	Industrial Track, curved, 36" gauge, no cross ties	232 "	.55	127.60
A-183 A-185 C-16	Switch—2 way	26	42.00	1,092.00
A-183 A-185 C-16	Switch—3 way	3	89.00	267.00
A-183 A-185 C-16	Turntable	2	206.00	412.00
A-184 C-16	Sheet Iron Coal Car, 3500# Capacity	11	250.00	2,750.00
A-53 C-13	5 Ton Industrial Platform Scale Platform 8' 0" x 4' 0"	2	374.22	748.44
	Total			$6,299.84
[fol. 3696]	Building: Boiler and Engine House "L"—Apparatus:			
A-1 C-7	14" x 24" Wright Horizontal Steam Engine, including Guard Rail Service: Drive for Coal Handling Apparatus	1	.....	$4,155.00
D-20	Foundation	....	.....	313.63
A-1 A-2 C-20	15 H. P. G. E. Motor, Including Housing	1	.....	480.44
D-14	Foundation	....	.....	11.06
A-1 C-14	60 H. P. Kelly, Berryman Closed Feed Water Heater, including Cover	1	.....	186.23
A-3 C-6	Worthington Duplex Steam Pump, 12" x 7" x 10" Service: Salt Water Fire Pump	1	.....	577.29
D-16	Foundation	....	.....	85.29
A-3 C-5	Blake Simple Steam Pump, 6½" x 4½" x 8". Service: Boiler Feed	1	.....	174.04
D-55	Foundation	....	.....	6.33
A-3 C-19	Horizontal Return Tubular Boiler 7' 0" dia. 87—3" tubes 11' 0" long, including covering	1	.....	3,298.00
D-5	Foundation	....	.....	302.01
	Carried forward			$9,568.68

Item		Material	Quantity, unit	Unit price	Total cost
[fol. 3697]		Brought forward			$9,568.68
		Building: Boiler and Engine House "L"—Apparatus (Continued):			
A-51 A-52 A-58 A-95 A-96 C-21 D-21		Coal Handling Apparatus, including Hoisting Drums, Dump Buckets, Guy Derricks, "A" Frame Derricks, Transmission, Pipe Railings, Guards, etc.	....	.....	14,925.00
		Foundation	....	.....	610.41
A-78 C-50		Steel Stack, 24" dia. x 20' 0" high	1	.....	162.00
A-52 C-45		7" Ashcroft Pressure Gauge	1	.....	8.39
		Total			$25,264.48
[fol. 3698]		Building: General Connections:			
		Gas Pipe			
B-39	3"	C. I. B. & S. Pipe	10 Lin. Ft.	$1.62	$16.20
B-39	4"	" " "	214 "	1.88	401.45
B-40	6"	" " "	923 "	2.34	2,159.82
B-43	8"	" " "	1,045 "	3.01	3,146.45
B-46	10"	" " "	403 "	3.64	1,469.01
B-48	12"	" " "	135 "	4.84	653.40
B-52	16"	" " "	182 "	6.81	1,239.42
B-56	20"	" " "	1,244 "	9.42	12,001.08
B-60	24"	" " "	201 "	12.29	2,470.29
B-64	30"	" " "	284 "	15.90	4,515.60
B-38	4"	" Flanged Pipe	2 "	2.07	4.14
B-42	6"	" " "	12 "	2.44	29.54
B-44	8"	" " "	24 "	3.23	77.52
B-47	10"	" " "	149 "	4.03	421.34
B-49	12"	" " "	52 "	5.33	247.16
B-54	16"	" " "	154 "	4.47	1,219.80
B-58	20"	" " "	457 "	10.69	4,885.33
B-66	24"	" " "	603 "	13.96	8,414.88
B-68	30"	" " "	51 "	19.15	976.65
B-51	12"	Riveted Steel Pipe	238 "	3.60	856.80
B-59	20"	" " "	854 "	5.50	4,713.50
B-61	24"	" " "	214 "	6.45	1,380.30
B-51	12"	Riveted Steel Blast Pipe	8 "	14.62	116.96
B-51	12"	216 G. I. Blast Pipe	20 "	5.21	104.20
B-51	14"	" " "	2 "	6.04	12.08
B-51	16"	" " "	32 "	6.49	217.28
		Total	7,582		$52,036.47
[fol. 3699]		Building: General Connections (Continued):			
		Gas Pipe Fittings			
B-39	3"	C. I. B. & S. Fittings	160 lbs.	.1544	$24.70
B-39	4"	" " "	549 "	.1272	13.65
B-41	6"	" " "	12,886 "	.1046	1,347.77
B-43	8"	" " "	5,290 "	.1010	534.29
B-46	10"	" " "	5,406 "	.0968	523.30

Item	Material	Quantity, unit	Unit price	Total cost
B-48	12" C. I. B. & S. Fittings.....	6,812 "	.0990	674.30
B-53	16" " " "	16,110 "	.0971	1,564.28
B-55	18" " " "	540 "	.0940	55.89
B-56	20" " " "	26,016 "	.1014	2,645.83
B-60	24" " " "	6,206 "	.1038	644.18
B-64	30" " " "	3,112 "	.1136	353.52
B-28	4" " Flanged "	384 "	.1462	56.14
B-42	6" " " "	1,589 "	.1231	220.23
B-44	8" " " "	1,149 "	.1190	139.82
B-47	10" " " "	5,823 "	.1140	663.82
B-50	12" " " "	10,410 "	.1154	1,295.93
B-54	16" " " "	10,402 "	.1118	1,162.94
B-58	20" " " "	29,134 "	.1141	3,324.19
B-65	24" " " "	103,743 "	.1139	11,812.91
B-68	30" " " "	25,068 "	.1232	3,088.38
B-51	12" Riveted Steel Fittings....	9,798 "	.182	1,783.24
B-59	20" " " "	25,156 "	.160	4,024.96
B-61	24" " " "	2,618 "	.156	408.41
	Total	308,686		$36,339.57

Blast Pipe Fittings

B-51	3/16 Steel Blast Fittings.....	418 lbs.	.4923	$205.78

[fol. 3700] Building: General Connections (Continued):

Valves

B-71	6" O. S. Gate Valve.....	2 each	$55.88	$111.76
"	6" I. S. " "	6 "	47.54	285.24
"	8" I. S. " "	5 "	66.44	332.20
"	10" O. S. " "	10 "	96.22	962.20
"	10" I. S. " "	2 "	80.96	161.92
"	12" O. S. " "	33 "	108.86	3,592.38
"	12" I. S. " "	4 "	92.34	369.36
"	16" O. S. " "	8 "	159.91	1,279.28
"	16" I. S. " "	9 "	134.80	1,212.45
"	20" O. S. " "	8 "	213.35	1,706.80
"	20" I. S. " "	4 "	182.02	1,274.14
"	24" O. S. " "	27 "	267.84	4,231.68
"	24" I. S. " "	14 "	228.14	3,193.96
"	30" O. S. " "	2 "	413.00	826.00
"	30" I. S. " "	1 "	341.50	341.50
"	16" Special 3-Way Valve.....	1 "	113.08	113.08
"	12" " " "	1 "	131.64	131.64
"	24" " Bypass "	2 "	333.32	666.64
	Total	142		$23,802.68
"	Floor Stands	17 "	$38.00	$646.00

Summary

Gas Pipe	7,582 ft.	$52,096.47
Gas Pipe Fittings.....	308,686 lbs.	36,339.57
Blast " "	418 "	205.78
Valves	142 "	23,802.68
Floor Stands	17 "	646.00
Total		$113,090.50

Item	Material	Quantity, unit	Unit price	Total cost
[fol. 3701]	Building: Small Piping:			
	Standard Steel Pipe			
B-95	¼" Dia	118 Lin. Ft.	.27	$31.86
"	⅜" "	740 "	.27	199.80
"	½" "	3,665 "	.30	1,099.50
"	¾" "	5,236 "	.37	1,937.32
"	1" "	2,139 "	.51	1,086.30
"	1¼" "	3,017 "	.73	2,202.41
"	1½" "	4,211 "	.88	3,705.68
"	2" "	6,573 "	1.13	8,557.49
"	2½" "	500 "	1.81	905.00
"	3" "	4,980 "	2.07	10,308.60
"	3½" "	54 "	2.64	142.56
"	4" "	2,594 "	2.91	7,548.54
"	5" "	96 "	3.92	376.32
"	6" "	1,268 "	5.40	6,847.20
"	7" "	3 "	6.40	19.20
"	8" "	2 "	7.19	14.38
	Total	36,187		$44,982.16
[fol. 3702]	Building: Small Piping (Cont'd):			
	Standard Brass Pipe			
B-95	¾" dia	10 Lin. Ft.	.70	$7.00
	Standard Galvanized Steel Pipe			
B-95	2" dia	356 Lin. Ft.	1.28	455.68
	Copper Pipe			
B-95	¼" dia	12 Lin. Ft.	.34	4.08
[fol. 3703]	Building: Small Piping (Cont'd):			
	Pipe Covering			
B-30	1" dia. Pipe (Hair Felt)	44 Lin. Ft.	.44	$19.36
"	1¼" dia. Pipe (Hair felt)	90 "	.47	42.30
"	1½" " " " "	264 "	.49	129.36
"	2" " " " "	1,142 "	.54	616.68
"	3" " " " "	964 "	.65	626.60
"	3½" " " " "	4 "	.68	2.72
"	4" " " " "	439 "	.73	320.47
"	6" " " " "	248 "	.93	230.64
B-31	¾" Dia. Pipe (Asbestos)	23 "	.33	7.59
"	1¼" " " "	38 "	.40	15.20
"	1½" " " "	25 "	.42	10.50
"	2" " " "	303 "	.44	133.32
"	2½" " " "	22 "	.50	11.00
"	3" " " "	59 "	.54	31.86
"	4" " " "	230 "	.70	161.00
	Total	3,922		$2,385.26
	Trenching			
B-36	1¼"-3" dia. Pipe	258 "	.42	$108.36

Summary

Item	Material	Quantity, unit		Unit price	Total cost
	Standard Steel Pipe	35,187	"	.....	44,982.16
	" Brass "	10	"	.....	7.00
	" Galv. Steel Pipe	356	"	.....	455.68
	Copper "	12	"	.....	4.08
	Pipe Covering	3,922	"	.....	2,385.26
	Trenching	278	"	.....	108.36
	Total				$47,942.54

[fol. 3704] 44th Street Holder Station

Summary of Costs

Valve House "A"	$1,634.30
Exhauster and Boiler House "C"	1,811.22
Yard	606.81
Holders	1,074,021.92
General Connections	39,086.36
Small Piping	2,323.32
Total	$1,119,483.94

[fol. 3705] 63rd Street Holder Station

Summary of Costs

Holder	$614,571.19
General Connections	26,194.44
Small Piping	1,156.84
Total	$641,922.47

[fol. 3706] 65th Street Holder Station

Summary of Costs

Engine and Valve House "B"	$20,745.94
Boiler House "P"	28,455.86
Meter and Stove Repair Shop "J"	1,606.97
Holders	1,192,983.39
Watchman's Office "D"	640.63
General Connections	54,805.93
Small Piping	6,060.42
Total	$1,305,299.14

[fol. 3707] 99th Street Station

1923

Summary of Costs

Office "C"	$54.55
Meter House "D"	27,406.82
Purifiers "E"	52,663.63
Condensers and Scrubbers "K"	36,415.55
Scrubbers "A-4"	8,320.29
Exhauster "L"	7,017.07
Tar Pump Pit	2,151.44
Yard	42,509.66
Scale House "C-1"	751.80
Coal Handling Apparatus Dock "D-c"	17,874.22
Coal Shed "S"	9,642.09

Retort Room "A-1"	3,204.42
Accumulator House "A-1"	4,346.44
Shop and Pump House "A-1"	8,203.45
Salt Water Condensers "A-3"	39,793.90
Boiler Room "A-1"	56,992.84
Engine Room "A"	33,332.81
Generator House "A-2"	123,955.81
Relief Holder #4	74,742.07
Commercial Holders	377,247.73
General Connections	73,546.32
Small Piping	37,606.76
Total	$1,037,869.67

[fol. 3708] 111th Street Holder Station

Summary of Costs

Exhauster House "B"	$34,971.31
Filter "W"	2,300.56
Holders #1 & #2	937,934.79
Boiler House "C"	15,753.47
Weigh House "H"	1,639.00
Coke Handling Plants "P" & "R"	71,153.50
Bulkhead "U"	1,649.00
General Connections	63,396.03
Small Piping	4,250.60
	$1,133,048.26

[fol. 3709] 132nd Street Holder Station

Summary of Costs

Governor House "A"	$43,091.17
Boiler House "B"	33,048.46
Holder	464,506.19
General Connections	78,856.04
Small Piping	5,209.41
Total	$624,711.27

[fol. 3710] 159th Street Shop

Summary of Costs

Shop	$1,087.55
Total	$1,087.55

[fol. 3711] Kingsbridge Holder Station

Summary of Costs

Boiler and Governor House "A"	$106,061.20
Holder	929,177.21
Yard	601.86
General Connections	83,098.44
Small Piping	6,183.17
Total	$1,125,121.88

[flo. 3712] Consolidated Gas Company

The Bartlett Hayward Company, Baltimore Md.

Summary

Item	Material	Quantity unit	Unit price	Total cost
	Building: Meters, Cocks, etc., Apparatus:			
	Meters	613,102	.....	$6,326,992.64
	Service Cocks	596,809	.....	221,917.09
	Valves	692	.....	4,440.66
	Caps and Swivels	.....	.....	213,016.87
	Unions	4	.....	31.50
	Meter Locks	174,736	.....	147,846.54
	Total			$6,914,245.30
[fol. 3713]	Building: Rental Appliances on District:			
	Peerless Cabinet	31,160	36.29	$1,130,796.40
	Peerless Elevated	6,675	42.80	285,690.00
	Miscellaneous "	19,583	26.1097	511,306.25
	Peerless Double Oven	26,308	29.11	765,825.88
	Miscellaneous Double Oven	52,731	12.25	645,954.75
	Peerless Junior	93,513	19.90	1,860,908.70
	Cookers	33,210	5.70	189,297.00
	Bake Ovens	568	135.60	77,020.80
	Broilers	4,131	29.1974	120,614.46
	Hotel Ranges	6,182	87.3666	540,100.32
	Hotel High Shelves	3,163	11.2963	35,730.20
	Total	277,224	.....	$6,163,244.76
[fol. 3714]	Building: Tools and Implements:			
	Tools and Implements, as shown on the books of the company	.....	.....	202,363
[fol. 3715]	Building: General Equipment:			
	General Equipment, including office, stable equipment, scows, etc., as shown on the books of the company	.....	.....	831,523
[fol. 3716]	Building: Laboratory Equipment:			
	Laboratory equipment, as shown on the books of the company	.....	.....	23,905.00

(Here follows Plaintiff's Exhibit No. 857, marked side folio page 3717)

PLAINTIFF'S EXHIBIT NO. 857

DIAGRAM OF CERTAIN PROPERTIES OF THE CONSOLIDATED GAS CO. USED JOINTLY WITH ITS AFFILIATED GAS COMPANIES

JUNE 1, 1923

S-5758

PLAINTIFF'S EXHIBIT NO. 857

3717

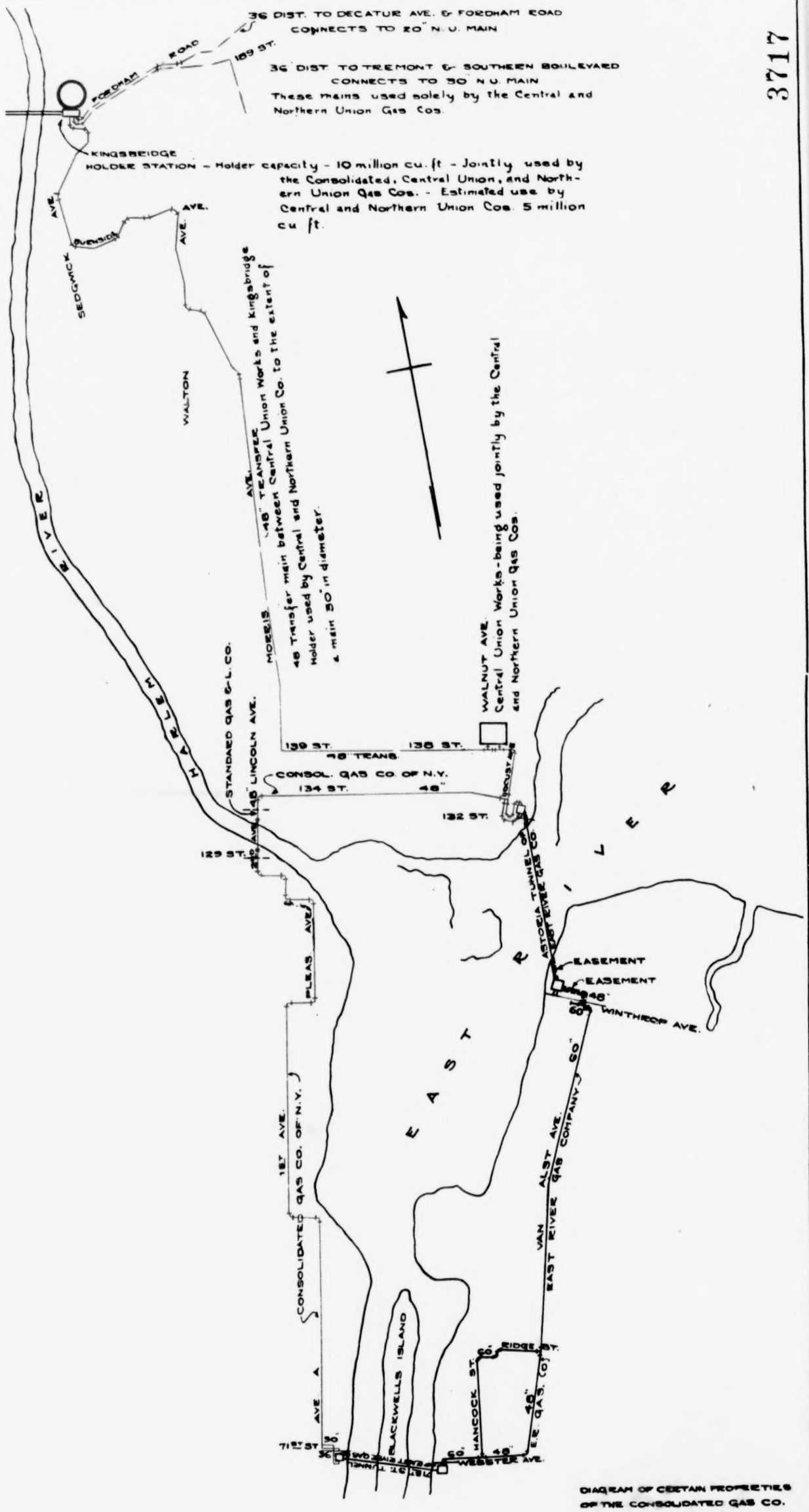


DIAGRAM OF CERTAIN PROPERTIES OF THE CONSOLIDATED GAS CO. USED JOINTLY WITH ITS AFFILIATED GAS COMPANIES

JUNE 1, 1923

S-5758

[fol. 3718] PLAINTIFF'S EX. NO. 858

UNITED STATES DISTRICT COURT, SOUTHERN DISTRICT OF NEW YORK

In Equity. No. 26-366

CONSOLIDATED GAS COMPANY OF NEW YORK, Plaintiff,

against

ALBERT OTTINGER, as Attorney-General of the State of New York, Defendant

Stipulation as to Plaintiff's Exhibit No. 858

It is stipulated and agreed that Plaintiff's Exhibit No. 858, consisting of 208 pages, which is endorsed "Astoria Light, Heat and Power Company, Astoria, Long Island Inventory & Reproduction Costs as of June 1, 1923," be not printed in full, but that there be printed the following pages, which contain summaries of the detail costs:

Five pages entitled "Astoria Light, Heat & Power Company, Astoria, Long Island, General Summary of Costs upon a Sub-contract Basis as of June 1, 1923;" of the structures and appurtenances of the Astoria plant.

It is further stipulated and agreed by the defendant Attorney General and appellant, but only for the purposes of this appeal:

(a) That the structures and appurtenances set forth in Plaintiff's Exhibit No. 858 were in existence on June 1, 1923;

[fol. 3719] (b) That the structures and appurtenances set forth in Plaintiff's Exhibit No. 858 were used and useful in the business of the Astoria Light, Heat and Power Company and/or plaintiff and appellee on June 1, 1923;

(c) That the quantities, units, unit prices and total cost contained in Plaintiff's Exhibit No. 858 are a correct estimate of the cost to reproduce as of June 1, 1923, each and every item contained in said exhibit on a subcontract basis as the same is described in the testimony of Henry Burt, upon the trial. It is understood, however, that the appellant does not, by so stipulating, concede that the sub-con-

tractor's profit is properly included in such an estimate of the cost to reproduce, or that the figure for field overhead should be included or is in the proper amount. Appellant reserves the right to contest on this appeal the propriety and amount of both field overhead and subcontractor's profit.

Dated New York, April 27, 1926.

Shearman & Sterling, Solicitor- for Plaintiff and Appellee. John Holley Clark, Jr., Solicitor for Defendant Attorney General and Appellant.